Illinois Department of Human Services
University of Illinois at Chicago - Division of Specialized Care for Children
Maternal and Child Health Services Block Grant
FFY'06 Needs Assessment

Needs Assessment Process

The Illinois Department of Human Services (IDHS) and the University of Illinois at Chicago's Division of Specialized Care for Children (DSCC) used some of the approaches recommended by[1] for conducting this year's needs assessment for the Maternal and Child Health Services Block Grant application. IDHS and DSCC convened three advisory panels to recommend priorities for the State's consideration. One panel addressed maternal and infant health, one panel addressed child and adolescent health and one panel addressed children with special health care needs. Each panel consisted of individuals selected for their expertise in a variety of maternal and child health areas. Physicians and other health professionals, advocates, academicians, service providers and family members were included. IDHS and DSCC prepared "data books" – reference documents of health status and health system capacity indicators – and distributed them to the panelists prior to each panel meeting. The "data books" presented in graphic or tabular form the information that will be discussed below on health status and health care resources for each major population group. Each panel deliberated and discussed a wide range of issues and concluded with a considerable degree of consensus about the most important issues and approaches for the State's future investment. IDHS and DSCC staff used these recommendations to select the priorities and state performance measures included in the application.

This needs assessment will present information in a similar manner. First, objective information will be presented about the health status of each Title V population. This will be followed by a discussion of the state's health care resources. Next, the structure and results of each panel discussion will be presented. The needs assessment culminates with a discussion of the State's priorities for the coming five years.

The State's Population

Illinois is currently the fifth most populous state in the country, up from sixth as of the 2000 Census. According to the 2000 Census there were 12,419,293 individuals in Illinois; the population was estimated at 12,653,544 as of July 1, 2003. According to this estimate there are 1,773,200 individuals aged 0 to 9; 1,811,877 individuals aged 10 to 19; and 900,056 individuals aged 20 to 24 in Illinois. In 2003 there were an estimated 2,723,508 women of childbearing age (15-44) in Illinois. According to the 2000 Census, Illinois' population profile is very similar to that of the United States as a whole. The population is approximately 75 percent White [2] (75.1 percent US, 73.5 percent IL); over ten percent Black (12.3 percent US, 15.1 percent IL); and about 12 percent Hispanic (12.5 percent US, 12.3 percent IL). Illinoisans live in more urban

[1] Gabor, V., Schwalberg, R., and Noonan G. 2004. MCH Needs Assessment and its Uses in Program Planning: Promising Approaches and Challenges. Washington, DC: Health Systems Research

[2] Racial and ethnic descriptions (e.g. "White", "Hispanic", etc.) used herein reflect the terms used in the source data.

locations than residents of the country as a whole: 87.8 percent of Illinois residents live in urban areas, but only 79 percent of the US population lives in such areas.

In terms of landmass, Illinois is the 23rd largest state; its 102 counties cover 55,593 square miles. The population is not evenly distributed across the state, however. The majority of the state's population lives in the following northeastern counties: Cook (includes Chicago), DuPage, Lake, McHenry, Will, and Kane. According to the American Community Survey (ACS), 66 percent of the state's population lives in one of these six counties, yet these counties account for less than ten percent of the land in Illinois. For the purpose of this narrative, these six counties (excluding the City of Chicago) will be referred to as "the Collar Counties"; the remainder of the state will be referred to as "Downstate" Illinois. Downstate Illinois accounts for one third of the population but over 90 percent of Illinois' land. As of the 2000 Census, there were 12 counties outside the Collar Counties whose populations exceeded 100,000. These include St. Clair and Madison Counties in southwestern Illinois; Peoria, Tazewell, McLean, Macon, Champaign, and Sangamon Counties in central Illinois; La Salle and Kankakee Counties in northeastern Illinois; and Rock Island County in northwestern Illinois. These counties include the small cities (at least 40,000 inhabitants) of Belleville, Bloomington-Normal, Decatur, Moline, Peoria, Rockford, Springfield, and Urbana-Champaign. Collectively, these cities account for 6.1 percent of the state population and 17.5 percent of the Downstate population.

Low-Income Families. According to the U.S. Census Bureau's American Community Survey (ACS) for 2003, the median household income in Illinois is $47,977, the average income is $63,127 and 11.3 percent of all Illinoisans had an income below the poverty level in the previous 12 months. Because of the absolute size of the White population in Illinois, the absolute number of Whites living in poverty is greater than the number of Blacks or individuals of Hispanic ethnicity. When looking at the proportion of individuals of a specific racial or ethnic group living in poverty, however, disparities become apparent: 26.3 percent of Blacks and 15.1 percent of Hispanics (any race) had incomes below the poverty level, compared to 7.9 percent of Whites. The ACS found that 15.8 percent of all children under age 18 lived below poverty in 2003. Approximately 34.7 percent of Black children, 19.6 percent of Hispanic children and 10.1 percent of White children below 18 years of age live below poverty. Single women head nearly one-fifth (18.8%) of all family households and more than one-fifth (22%) of families with children under 18 years of age. This increases to 43.6 percent when only female-headed households with related children under the age of five are considered. Among female-headed households, 42.3 percent of Black, 32.0 percent of Hispanic and 30.4 percent of White households live below poverty.

Population Distribution by Age, Race, and Ethnicity. Not surprisingly, individuals belonging to different racial, ethnic, and age groups reside in different areas of the state. Nearly half the state's White population resides in the Collar Counties, and another 40 percent reside Downstate; Whites account for 89 percent of the total Downstate population. More than half of the state's Black population lives in Chicago, and Blacks make up 36 percent of that city's population; Cook County has the largest African-American population of any county in the nation. Also, Hispanics make up 26.0 percent of the population in Chicago, which is ranked third in the nation among major metropolitan cities. Individuals who identify themselves as American Indian/ Alaska Native or being of more than one race primarily live in the Collar Counties. Over 60 percent of the state's Native Hawaiian/Other Pacific Islander population lives in Chicago, and

nearly all individuals of Other races live in Chicago or suburban Cook County and the collar counties (91%). Native Americans comprise 0.3 percent of the state's population.

Proportion of Population of Each Race Living in Each of Three Select Geographic Regions, 2000

	Chicago	**Collar**	**Downstate**
White	13.3%	44.5%	42.2%
Black	56.7%	26.1%	17.2%
American Indian/ Alaskan Native	33.2%	36.3%	30.5%
Asian	29.7%	59.7%	10.6%
Multiracial	35.9%	42.6%	21.5%
Hispanic (all races)	49.2%	42.6%	8.2%

Geographic Living Area for Resident Children Aged 0-19 Years, 2000

	0-4	**5-9**	**10-14**	**15-19**
Chicago	24.9%	24.1%	22.2%	22.5%
Collar	44.1%	44.1%	43.7%	40.5%
Downstate	30.9%	29.7%	34.1%	37.0%

English as a Second Language. According to the 2000 Census and the 2003 ACS, approximately 80 percent of Illinoisans age 5 and over speak English exclusively. Of the nearly 2.5 million Illinoisans who speak another language, 47 percent rated their ability to speak English less than "very well" in both 2000 and 2003. Respondents between the ages of 5 and 17 rated their English skills better than older individuals: 64 percent of this group said they spoke English "very well" compared with 50 percent of 18 to 64-year-olds and only 46 percent of those aged 65 or older. The majority (82%) of residents who do not speak English are Hispanic.

Racial and Ethnic Diversity. In Illinois it was estimated that there are 3,404,121 children between the ages of 1 and 19 as of July 1, 2003. This represents 26.9 percent of the total population and was a 0.8 percent decline from 2000. Within this population 76.3 percent were White, 19.4 percent were Black, 3.9 percent were Asian or Pacific Islander, and 0.4 percent were Native American or Alaskan. In 2003, 18.3 percent of this population was Hispanic. Compared to 2000, the population of White and Black children decreased slightly, while the Hispanic population increased by 7.6 percent. This increase was not distributed evenly between children age 1 to 9 years old and those age 10 to 19 years old. Children 1 to 9 years old accounted for more than 60 percent of the increase in the Hispanic population age one to 19 years old. The 2,723,508 women of childbearing age make up 21.5 percent of the total population in Illinois as of July 1, 2003. The racial distribution of this group is similar to the state as a whole, where 77.7 percent are White, 16.8 percent are Black, 0.4 percent are Native American or Alaskan, and 5.0 percent are Asian or Pacific Islander. Hispanic women make up 15.1 percent of this population. For Hispanic women this was an 8.7 percent increase in population since 2000. The bulk of this increase was seen in Hispanic women age 20 to 44. The racial distribution of women 15 to 44 changed very little between 2000 and 2003. The proportion of White and Black women of childbearing age saw small decreases while the Asian population experienced a 12 percent increase to 136,657 women, or 5.0 percent of this population (4.5 % in 2000).

Women of Child-Bearing Age

There were an estimated 2,723,508 women of childbearing age in Illinois as of July 1, 2003, including 866,191 age 15 to 24, 890,030 age 25 to 34, and 967,287 age 35 to 44. Women of childbearing age make up 21.5 percent of the state's population. In 2001-2002, 17.7 percent of women aged 18 to 64 in Illinois lacked health insurance for at least part of the year.

Health Behaviors

Folic Acid Awareness and Multivitamin Use. According to data from the year 2002 (the most recent year available) from Illinois' Pregnancy Risk Assessment Monitoring System (PRAMS), 85 percent of women surveyed reported they had heard that consuming folic acid could help prevent some birth defects. The proportion of respondents who had heard this message was highest among women age 25 or older, women of White or Other race, and women of Hispanic ethnicity. Women who were Black or under age 20 had the lowest rate of reporting such knowledge. When asked how frequently they consumed a multivitamin in the month before they got pregnant, 52 percent said they weren't taking vitamins, while 40 percent said they took such a vitamin at least four days a week. Use of vitamin supplements was highest among women age 25 or over and women of White or Other race, while non-use of vitamins was highest among women younger than age 20 and Black women.

Overweight/Obesity. As was the case five years ago, half the women interviewed for Illinois' Behavioral Risk Factor Surveillance System (BRFSS) were overweight or obese[3]. The distribution of women between these categories has shifted over time. In 1998, 30 percent of the respondents were overweight and 19 percent were obese. The year 2003 continued the increase of overweight Illinoisans. The percent of overweight women grew to 29 percent; obese women remained at 23 percent. Now, less than half of women are categorized as having a healthy weight. Results of both Illinois surveys closely mirrored those reported across the nation. A similar patter is seen among women who participate in the WIC program. In 2000, 24.5 percent were overweight and 20.2 percent obese were obese prior to pregnancy. By 2004, these proportions had increased to 25.4 percent overweight and 22.8 percent obese. All of the above figures are well in excess of the *Healthy People 2010* goal of only 15 percent of the population being considered obese.

Nutrition and Physical Activity. Less than one-fifth (17%) of the women who participated in the 2003 BRFSS reported that they consumed five or more daily servings of fruit and vegetables (BRFSS, 2003). Nationally, the proportion was 18 percent. On the other hand, more than 70 percent reported that they engaged in leisure-time physical activity. This proportion still compares unfavorably to the national rate of 75 percent (BRFSS, 2003).

Smoking. According to BRFSS data, the smokers have decreased slightly between 1997 and 2003. In 1997, 21.6 percent of women were current smokers, compared to 20.5 percent in 2003. The prevalence of smoking in Illinois was higher than the national average in 1997, 1999, and

[3] (Overweight and obesity in the BRFSS are determined by Body Mass Index, which is calculated from self-reported weight and height.)

2003, and remains well in excess of the *Healthy People 2010* goal that only 12 percent of adults report they are current smokers.

According to data from Illinois' PRAMS survey in 2002, 21.6 percent of respondents reported smoking cigarettes in the three months before they became pregnant; this is a slight decrease from 1998 when 24.3 percent of women smoked during this time. The proportion of women who smoked before becoming pregnant was greatest among women who were under age 25, age 35 or older, White, or non-Hispanic. The proportion of women who reported smoking during the last three months of their pregnancy decreased 47 percent to 11.4 percent; this is also a slight improvement from the 1998 value of 13.8 percent. The highest rates of smoking during the last three months of pregnancy were found among women aged 20 to 24 or 35+, White women, and non-Hispanic women. In the early postpartum period, 16.8 percent of women who delivered a live birth in Illinois reported smoking cigarettes; this represents a decrease from the proportion who smoked before pregnancy but a marked increase from the proportion who smoked during the last three months of pregnancy. Women with the highest rates of tobacco use postpartum were those under age 25 and non-Hispanic women; similar proportions of Black and White women reported cigarette use at this time.

The 2003 Pregnancy Nutrition Surveillance System (PNSS) found that a similar proportion of women reported smoking cigarettes during the three months prior to pregnancy (20.9%) and during the last three months of pregnancy (12.9%). As with PRAMS, non-Hispanic White women had the highest prevalence of both smoking prior to pregnancy (45.0%) and smoking during the last three months of pregnancy (29.1%).

Alcohol. Alcohol use during pregnancy is associated with health problems that adversely affect the mother and fetus; no level of alcohol consumption during pregnancy has been determined safe. Women who drink during pregnancy place themselves at risk for having a child with fetal alcohol syndrome (FAS) or fetal alcohol spectrum disorders (FASD). Nationwide, more than half of women who did not use birth control (and therefore might become pregnant) reported alcohol use and 12.4 percent reported binge drinking (BRFSS, 2004). In Illinois, use of alcohol by women of reproductive age is common. Using BRFSS data from 2003, 49.9 percent of Illinois women drank alcohol in the past month, up from 47.2 percent in 1997. BRFSS also indicates that just fewer than ten percent of Illinois women engage in binge drinking – this figure has remained relatively unchanged since 1997. This figure also exceeds the *Healthy People 2010* target that only six percent of adults will report binge drinking in the past month. Unfortunately, the proportion of women who report chronic drinking – consuming at least 60 alcoholic drinks in the past 30 days – has increased from 1.2 percent in 1997 to 4.1 percent in 2003.

According to data from PRAMS in 2002, 47.5 percent of women in Illinois drank alcohol in the three months before they became pregnant; 46.2 percent of women reported this behavior in 1998. This proportion was highest among women age 35 or older, White, and non-Hispanic women. In both the 1998 and 2002 surveys, only six percent of women reported drinking alcohol during the last three months of pregnancy.

Sexually Transmitted Infections

Gonorrhea. The number of reported Gonorrhea cases in Illinois has decreased over the past decade from 29,275 in 1992 to 21,817 in 2003. While the US Gonorrhea rate was 116.2 cases per 100,000 in 2003, the rate was 173.1 cases per 100,000 in Illinois in 2003. The state ranked 8th in the nation that year, up from 12th place in 2000. The state Gonorrhea rate for females was 181 cases per 100,000 in 2003, higher than the national rate of 118.8 per 100,000. Chicago's rate of 392.7 per 100,000 was ranked 15th highest among large cities; the city was ranked 22nd in 2000. The *Healthy People 2010* goal is 19 new Gonorrhea cases per 100,000 persons.

While the number of cases among Blacks has decreased from over 23,000 in 1992 to 14,448 in 2003, they still represent two-thirds of all cases of Gonorrhea and the racial disparity in the incidence rate between Blacks and Whites is nearly 28:1 (752.63 vs. 26.65 cases per 100,000, respectively). Cases among Whites have increased over the same time period (1,837 to 2,680 cases). For the state as a whole, 73 percent of cases were to non-Hispanics, 66 percent to Blacks, and 12 percent to Whites. Individuals between the ages of 15 and 24 accounted for 61 percent of all cases, and individuals aged 25-29 accounted for a further 16 percent of cases. Just over half (53%) of cases were reported among females. Of all reported cases in 2003, 55.6 percent of these cases occurred in Chicago. The proportion of Gonorrhea cases reported among demographic groups varies between Chicago and the rest of the state. Whites account for a much greater proportion of downstate Gonorrhea cases than in Chicago (22 % vs. 5%). Additionally, downstate individuals aged 15 to 19 accounted for a greater number and proportion of cases than their peers in Chicago. Downstate teens account for 31 percent of all downstate cases, whereas Chicago teens account for 26 percent of all Chicago cases. A greater proportion of reported cases downstate are among females (57 percent downstate vs. 50 percent Chicago).

Chlamydia. The number of Chlamydia cases reported in Illinois has nearly doubled over the past ten years, from 25,253 cases in 1992 to 48,294 cases in 2003; nearly two-fold increases were seen for both Blacks and Whites. While the US Chlamydia rate in 2003 was 304.3 cases per 100,000, Illinois' 2003 Chlamydia rate was 383.3 cases per 100,000 and was ranked 7th in the nation; the state was ranked 19th in 2000. The state Chlamydia rate for females was much higher - 564.9 cases per 100,000 in 2003 - than the national rate of 466.9 per 100,000. Chicago's 2003 rate of 720.6 per 100,000 was ranked 11th highest among large cities; the city was ranked 32nd in 2000. Of cases reported in 2003, 51.3 percent occurred in Chicago.

For the state as a whole, 51 percent of new cases occurred among Blacks, 36 percent of cases occurred among Hispanics, and 24 percent occurred among Whites. Individuals between the ages of 15 and 24 accounted for 70 percent of all Chlamydia cases. Three-quarters of all cases were reported among females. As with Gonorrhea, the proportion of Chlamydia cases reported among demographic groups varies between Chicago and the rest of the state. Blacks in Chicago account for a greater proportion of cases than Blacks downstate (61% vs. 41%, respectively), but Whites account for a much smaller proportion of cases in Chicago than downstate (9% vs. 37%, respectively). Additionally, Downstate individuals aged 15 to 19 account for a greater number and proportion of cases than their peers in Chicago. Downstate teens in this age group account for 37 percent of all downstate cases, whereas Chicago teens account for 30 percent of all cases.

Syphilis. Statewide, the number of Syphilis cases (early, primary, and secondary combined) decreased steadily from 1992 through 1998, at which point numbers again began to increase, particularly among males. There were 1,376 total Syphilis cases reported in Illinois in 2003 for a statewide rate of 10.9 cases per 100,000; this rate is slightly below the national rate of 11.7 cases per 100,000 but well in excess of the *Healthy People 2010* goal of 0.2 cases per 100,000. The number of Syphilis cases among Blacks decreased dramatically between 1992 and 2003 (7,162 cases in 1992 vs. 535 in 2003), while the number of cases among Whites increased slightly (310 cases in 1992 vs. 445 in 2003). The total Syphilis rate for the City of Chicago was 37.2 per 100,000; again well in excess of both national and *Healthy People 2010* rates. The proportion of cases among Black and White individuals is essentially equal, and 30-44 year olds account for the majority of cases (55.3%). In contrast to Gonorrhea and Chlamydia, the burden of Syphilis infections is borne primarily by males (82.1%). According to the CDC, Illinois currently has the 11th highest rate of primary and secondary Syphilis, up from 13th in 2000 but down from 5th in 2002. On this same measure, Chicago ranks 12th of all cities greater than 200,000 in the nation (down from 7th in 2002 and 10th in 2000), and Cook County has the 3rd highest rate of Syphilis among counties in the United States, down from the highest rate in 2000.

Cases of congenital Syphilis have also dramatically decreased among Blacks during the past decade (360 cases in 1992 vs. 19 cases in 2002). According to the CDC, Illinois' congenital Syphilis rate of 10.5/100,000 live births ranked 6th in the nation in 2000 and 14th in 2003. The state rate is just above the national average of 10.3 cases per 100,000 live births but is well above the *Healthy People 2010* goal of 1 case per 100,000 live births. Chicago's rate of 29.2 cases per 100,000 live births currently ranks 15th in the nation, down from 5th in 2002 and 9th in 2000. With only 21 reported cases, congenital Syphilis remains relatively rare in Illinois. Blacks continue to account for nearly all cases of congenital Syphilis.

HIV/AIDS. Between July 1, 1999 and December 31, 2004 there have been 3,210 cases of HIV reported among women in Illinois; this number represents 26 percent of all adult cases in the state. More than two-thirds of these cases (68%) are non-Hispanic Black women. Whereas the top transmission modes for males are men having sex with men and injection drug use, 42 percent of women were infected through heterosexual intercourse and 24 percent through injection drug use.

A total of 5,055 AIDS cases have been reported among women in Illinois between January 1, 1981 and December 31, 2004; this number represents 16 percent of all adult AIDS cases. Two-thirds of these cases (66%) are non-Hispanic Black women. Whereas the top transmission modes for males are men having sex with men and injection drug use, 48 percent of women were infected through intravenous drug use and 38 percent were infected through heterosexual intercourse. In 2002, Illinois had the 17th highest rate of AIDS among females in the nation.

The different exposure patterns seen between HIV and AIDS cases is likely influenced by the different time periods which each measure covers – AIDS cases have been tracked for much longer and contain much historical data, whereas the monitoring of HIV infection is a relatively new phenomenon and thus may more closely reflect current transmission patterns of this virus.

Among individuals aged 25 to 64 years, the mortality rate among Blacks from HIV/AIDS (ICD-10 codes B20 through B24) in 2001 was 16.4/100,000 for females and 54.1/100,000 for males. Among Whites, the rates were 1.0/100,000 for females and 5.5/100,000 for males. Using these crude death rates, HIV ranks as the third most frequent cause of death for Black males, the 12th for Black females, the 21st for White males, and the 44th for White females.

Comparison of Number of Cases and Rates (per 100,000) of Select STDs by Gender in Illinois, 2003

	Total		Males		Females	
	Cases	**Rate**	**Cases**	**Rate**	**Cases**	**Rate**
Gonorrhea	21,817	173.1	10,192	165.0	11,624	181.0
Chlamydia	48,294	383.3	12,009	194.4	36,284	564.9
Primary and Secondary Syphilis	374	3.0	326	5.3	48	0.7
Congenital Syphilis	19	10.5	-	-	-	-
HIV*	12,905	-	9,594	-	3,331	-

* Adult and Adolescent cases reported between July 1, 1999 and March 31, 2005

Reproductive Health

Reproductive health services are fairly accessible in Illinois. Insurance companies must cover contraceptives, direct entry to OB/GYN providers is allowed, information about emergency contraception must be provided to sexual assault survivors, there is no mandatory waiting period before an abortion is obtained, and HIV testing for mothers and newborns is voluntary.

Women in Need of Contraception. As noted above, there were an estimated 2,723,508 women of reproductive age (15-44) in Illinois as of June 30, 2003. According to the Alan Guttmacher Institute (AGI), there were 1,568,370 women (57.6 percent of women in Illinois) in need of contraceptive services in Illinois in 2000. Of these women, 705,100 were in need of publicly subsidized family planning services; this represents 45 percent of all women in need of contraceptives and 26 percent of all women of childbearing age in Illinois.

Use of Family Planning Services: For calendar year 2003, 55 Title X grantee agencies served 150,048 unduplicated clients at 119 clinic sites, a slight increase from 149,711 clients in 2002. The number of clients in 2003 represents 21 percent of the women in need of publicly subsidized family planning services. In 2003, 69.6 percent of clients were between 0-100 percent FPL, 88.3 percent were between 0-150 percent FPL, 17.5 percent were Medicaid recipients, and 28.4 percent were adolescents (<20 years old).

Illinois' Medicaid family planning waiver, Illinois Healthy Women, began in April 2003. In the first eight months of this program, 78,463 three-month cards were issued, 17,957 nine-month cards were issued, and 11,284 women received a service paid for by this waiver.

There were at least 11,416 units of emergency contraception (EC) distributed by Title X clinics in Illinois in 2003, an increase of 2,425 units over 2002; Title X administrators believe that the actual number of units dispensed was higher than this. Emergency rooms in Illinois are

required to provide information about EC to women who have been sexually assaulted; they are not required to dispense EC upon request.

As of January 1, 2004, insurers in Illinois are required to cover outpatient family planning services and contraceptives if they cover other outpatient services and pharmaceuticals. Religious or secular organizations may claim an exemption of this provision on religious, moral, or ethical grounds.

Pregnancy

Fertility. The fertility of women in Illinois has decreased in the past several years. Whereas in 1998 there were 68.3 live births per 1,000 women aged 15-44 in Illinois, there were only 66.8 births per 1,000 women of this age group in 2003. While the fertility rate of all women aged 15-44 in Illinois had declined, preliminary data for the United States shows and increase in the fertility rate for this group over this period (65.6 in 1998 vs. 66.1 births per 1,000 in 2003). As with other indicators, racial and ethnic differences are observed for the fertility of Illinois women. Whereas the fertility rates for White women are slightly lower than the state rate, the rates for both Black and Hispanic women are higher than the state rate. A sharp decline in the fertility rate of Black women was seen between 1990 and 2000, during which time the rate decreased from 99.2 to 75.2 live births per 1,000 women. The fertility rate of Black women continues to decline, and in 2003 was only slightly higher than the state rate (68.2 births per 1,000 Black women vs. 66.8 births per 1,000 women). The fertility rate among Hispanic women remains well above the state average and has not shown the dramatic decline that has been seen among Black women. The Hispanic fertility rate declined only slightly, from 110.5 to 102.8, between 1990 and 2003. A continued slow decline is evident, but the fertility rate for this ethnic group remains well above the state rate (102.8 live births per 1,000 Hispanic women vs. 66.8 live births per 1,000 Illinois women).

Intendedness of Pregnancy. According to Illinois PRAMS data for 2002, 43 percent of all live births in Illinois were unintended (mistimed or unwanted). This continues to exceed the *Healthy People 2010* goal that 70 percent of all pregnancies will be intended (or 30 percent unintended), and is a slight increase from the 1998 figure that 40 percent of pregnancies were unintended. At least half of pregnancies to women with the following characteristics were reported to be unintended: <25 years old, Black, had a high school education or less, and had an income under $35,000. The only subgroups of women who have reached the goal of at least 70 percent intended pregnancies are women over the age of 35 and women with greater than a high school education. Unintended pregnancies are not necessarily occurring to women who fail to use contraception. PRAMS data from 2002 indicate that 46 percent of women with a mistimed pregnancy and 46 percent of women with an unwanted pregnancy reported using contraception at the time they became pregnant.

Initiation of Prenatal Care. Although the proportion of all Illinois women who initiate prenatal care in the first trimester has increased from 80.85 percent in 1999 to 82.0 percent in 2003, the state is still below both the national rate and the *Healthy People 2010* goal of 90 percent. The rate of early initiation has been essentially stable for White women - 83.8 percent initiated prenatal care in the first trimester in 1999 and 84.5 percent did so in 2003. Over this same time period, the rate of Black and Hispanic women who initiated prenatal care in the first

trimester increased substantially; from 68.1 percent to 71.3 percent for Black women, and from 70.0 percent to 76.3 percent for Hispanic women. In 2003, women living in Downstate Illinois had a higher rate of early initiation (84.6%) than did women who lived in Cook or Collar counties (80.9%). At least 86 percent of women aged 25 and older initiated prenatal care in the first trimester in 2003; women aged 25-29 and those at least 40 years of age had the lowest rates of early initiation among these mothers. For younger women, 67 percent of mothers under age 20 and 76 percent of mothers 20-24 years of age initiated prenatal care in the first trimester. For these women under age 25, the rates of early initiation are 4 percent higher than in 1999.

The proportion of women who either entered prenatal care in the third trimester or did not enter prenatal care at all also decreased from 4.1 percent in 1999 to 2.7 percent in 2003. As with the above prenatal care data, there was a small but steady change for White women while the change for both Black and Hispanic women was more substantial (8.7 percent to 6.4 percent for Black women, 5.9 percent to 3.0 percent for Hispanic women).

The fraction of Illinois births to women who did not receive any prenatal care is small; only 0.9 percent of all births had no prenatal care in 2003, down from 1.5 percent in 1996. Among women who did not receive prenatal care, 60 percent were non-Hispanic Black, 68 percent lived in Cook County, and 51 percent were under the age of 25.

Adequacy of Prenatal Care. In Illinois the percent of women receiving "adequate" prenatal care, according to the Kessner index, increased from 73.8 percent in 1999 to 74.4 percent in 2003. The highest rates of "adequate" prenatal care were seen in women age 30 to 39 (82.4 % in 1999 and 80.4 % in 2003). The lowest rates of "adequate" prenatal care were seen in women age ten to 19 (54.3 % in 1999 and 58.1 % in 2003). Percentages of women receiving a rating of "inadequate" on the Kessner index rose slightly over the time period from 8.0 percent to 8.2 percent and were highest among Black women (15.6 % in 1999 and 14.5%in 2003). Rates of "inadequate" prenatal care were highest among women age ten to 19 at 12.9 percent in 2003 (down from 14.2 % in 1999). It was also observed in this age group, during 2003, that Black teens had the highest rate of "inadequate" prenatal care (16.6 %) compared to White (10.%) and Hispanic (12.6 %) teenagers. Rates of "inadequate" prenatal care in all women, specifically women age ten to 19, have dropped over the time period.

Within racial and ethnic groups White women maintained the highest percent of "adequate" prenatal care at 77.5 percent in both 1999 and 2003. Hispanic women were next with 66.9 percent receiving "adequate" prenatal care in 2003, up from 59.9 percent in 1999. Black women had the lowest rates of "adequate" prenatal care, 58.0 percent in 1999 and 60.8 percent in 2003. Illinois residents experienced a decreased in the percent of women receiving an "inadequate" rating from the Kessner index, regardless of race or ethnicity.

Content of Prenatal Care. Illinois PRAMS provides information on self-reported content of prenatal care. Women are asked to report whether a doctor, nurse, or other health care worker talked with them about several topics during their prenatal care. The table below presents these results.

Self-Reported Prevalence of Discussions with Health Care Providers on Health Promotion Topics during Prenatal Care. Illinois PRAMS, 2002					
	Total	**White**	**Black**	**Hispanic**	**Non-Hispanic**
How smoking could affect your baby	74%	72%	86%	80%	73%
Breastfeeding	82%	80%	92%	82%	82%
How drinking alcohol could affect your baby	74%	72%	85%	79%	72%
Using a seatbelt	52%	49%	63%	62%	49%
Birth control to use after pregnancy	80%	78%	89%	81%	80%
Medicines that are safe to take during pregnancy	88%	89%	85%	86%	89%
How using illegal drugs could affect your baby	66%	63%	82%	76%	63%
Doing tests to screen for birth defects or diseases that run in the family	85%	85%	87%	76%	88%
What to do if your labor starts early	86%	85%	90%	84%	86%
Getting tested for HIV	80%	77%	90%	77%	81%
Physical abuse to women by husbands or partners	45%	41%	65%	56%	41%

Overall, a greater proportion of women reported that their healthcare providers asked them if they were smoking (90%) than discussed how smoking could affect baby (74%), and a greater proportion of providers asked if mom drank alcohol (82%) than discussed how alcohol could affect baby (74%). In both instances, it appears that providers may not discuss the dangers of maternal use of tobacco or alcohol during pregnancy if a woman states she is not using one of these substances. African-American women were more likely than Hispanic or White women to report that their health care provider had discussed each of these topics during a prenatal care visit.

The topic above discussed the least often with pregnant women is physical abuse. Data from PRAMS indicate that in the year before becoming pregnant, approximately five percent of Illinois women experienced abuse by their husband or partner, and approximately two percent experienced abuse by another person. Both of these rates decline during pregnancy - approximately three percent of women report abuse by a husband or partner, and slightly more than one percent of women report abuse by someone else. These estimates are very likely an underestimate as they come from self-report survey data; most estimates of the prevalence of domestic violence during pregnancy range between 3.9 percent and 8.3 percent.

HIV Testing During Pregnancy. In 2002, 73 percent of women with a live birth in Illinois reported being tested for HIV at some time during her prenatal care or delivery; this is an increase from 64 percent in 1998. Despite this advance, 12 percent of women responding to the PRAMS survey stated they did not know whether or not they had been tested for the virus.

Weight gain during pregnancy. Among WIC enrollees, the proportion of women who failed to gain an adequate amount of weight during pregnancy decreased from 26.7 percent in 2000 to 22.7 percent in 2002.

Births to Unmarried Women. Over one-third (35.3%) of all births in 2003 were to unmarried women, up from 34.8 percent in 2002. The proportion of infants born to single mothers varies by race, ranging from 21.1 percent of non-Hispanic White women, 76.4 percent of non-Hispanic Black women, and 44.2 percent of Hispanic women.

Prematurity. In 2003, 10.2 percent of all infants in Illinois were born before 37 weeks gestation and were considered pre-term. This is an increase from the 1999 pre-term rate of 9.7 percent, and is below the national average (12.1% in 2002). However, the 2003 percentage of pre-term births is above the *Healthy People 2010* goal (7.6%). The proportion of non-Hispanic Black infants born pre-term has increased slightly from 14.2 percent in 1996 to 14.5 percent in 2003. For Hispanic and non-Hispanic White infants; however, the proportion born pre-term has seen a larger increase during this same time period (8.2 % in 1996 to 9.4 % in 2003). The rate of pre-term birth for Hispanic infants has increased as well to 8.1 percent over this period; the non-Hispanic White rate has increased from 8.6 percent to 10.0 percent between 1996 and 2003. African-American women are about one-and-a-half times more likely than White or Hispanic women to deliver prematurely.

Caesarean Sections. In 2003, approximately one out of four live births were delivered by cesarean section. The proportion of C-section births was directly related to maternal age, higher among non-Hispanic women, and equal among white and black women. Approximately 40 percent of births to women over 40 were C-section births. The patterns of c-section by age, race and ethnicity have remained constant since 1997; however the overall rate has increased by 20 percent. It is unknown what proportion of the increase is medically indicated, reflects a change in practice or policy, or convenience for the woman or her physician.

Breastfeeding. Using data from Illinois PRAMS, 73.8 percent of new mothers in Illinois initiated breastfeeding with their new infant, up from 66.5 percent in 1998. The 2002 figure indicates that, as a state, Illinois is very close to achieving the *Healthy People 2010* goal of 75 percent breastfeeding in the early postpartum. The proportion of new mothers who breastfeed at one month parallels the proportion who initiate breastfeeding; by one month, 60.2 percent of women were still breastfeeding in 2002, up from 55 percent in 1998. While these data indicate that breastfeeding rates in Illinois are improving, much work remains to be done if the state is to attain the *Healthy People 2010* goal of 50 percent breastfeeding at six months.

Although the state has not yet reached the *Healthy People 2010* target for breastfeeding initiation, several sociodemographic groups have done so: more than 75 percent of White women, Hispanic women, women with more than 12 years of education, and women aged 25 and older initiate breastfeeding in the early postpartum. The group of women with the lowest rate of breastfeeding initiation is Black women (48.5%), followed by women under age 20 (53.6%) and women with a high school education (62.7%). Among women participating in the WIC program, 56.7 percent initiated breastfeeding and 22.1 percent were still breastfeeding at six months or more postpartum.

Among women who did not initiate breastfeeding, the most commonly cited reason was that they did not like it. Return to work or school and having other children to take care of were also frequently cited. Among women who discontinued breastfeeding by the time the survey was

administered, the most commonly cited reasons were perceiving that baby was not satisfied with only breast milk, mom thought she was producing insufficient milk, mom had difficulty nursing, or mom returned to work or school.

Postpartum Use of Contraception. In the postpartum period, 85.3 percent of women who had a live birth are using contraception, according to the 2002 PRAMS survey. On this measure, women under the age of 25 and Black women reported the highest rates of use. The only group in which less than 80 percent of women reported using postpartum contraception was women of Other race. Among the 14.7 percent of women not using postpartum contraception, the most frequently cited reasons were that the woman is not currently sexually active (31.4%), she does not want to use contraception (22.6%), or that she desires a pregnancy (17.6%).

Interpartum Interval. Similar percentages of women experienced subsequent-pregnancies in 2000 and 2003. The proportion of women who experienced an interpartum interval (IPX) of <24 months dropped slightly from 32.3 percent in 2000 to 31.9 percent in 2003. In 2003 Black women experienced the highest percentage of births with an IPX less that 24 months: 35.2 percent; White women were next at 29.4 percent; and Hispanic women had the lowest percentage of women with an IPX <24 months at 27.2 percent. The same pattern was seen in these racial/ethnic groups when examining interpartum intervals less than 18 months and less than 12 months. Longer inter-birth intervals (24+ months) were inversely associated with maternal age: almost 70 percent of women between age 20 and 39 had such a birth interval, but this was true of only 38 percent of mothers ages 10 to 19. Teenage mothers also experienced the highest percentage of subsequent births within 18 months of their previous birth (38.9%), and within one year of their previous birth (7.8%). These percentages are roughly 1.5 to 2 times as high as the corresponding percentages found in older age categories. (Additional information on teen childbearing is presented below, under "Adolescents.")

Pregnancy Outcomes

Abortion. Approximately 20 percent of all pregnancies and 31 percent of teenage pregnancies in Illinois end in elective abortion. There are three primary data sources for abortion information in Illinois: the Illinois Department of Public Health (IDPH), the U.S. Centers for Disease Control and Prevention (CDC), and abortion surveillance reports from the Alan Guttmacher Institute (AGI).

According to IDPH, 42,228 abortions were performed in Illinois in 2003, but only 38,700 of these were for Illinois residents. The total number of abortions performed in 2003 was 10,000 fewer than were performed in 1995. Approximately 90 percent of all abortions performed in the state are for Illinois residents. Note that the number of abortions performed for Illinois residents reported by the CDC includes women who obtained abortions in other states, and thus the number is higher than that reported by IDPH (41,815 vs. 40,754 procedures). According to AGI, 63,690 abortions were performed in Illinois in 2000; nearly 40 percent higher than the number reported by IDPH. These data also demonstrate a decreasing absolute number of abortions from 69,390 in 1996 (IDPH reported 53,613 in 1996).

Number of Abortions Performed in the State and Number Performed for State Residents, by Year; Illinois, 1999-2003

	1999	2000	2001	2002	2003
Number of abortions performed in Illinois	45,924	45,884	46,546	46,945	42,228
Number of abortions among Illinois residents	41,509	40,754	41,523	42,655	38,700
Percent abortions to Illinois residents	90.4%	88.8%	89.2%	90.9%	91.6%

Total Abortions Performed in the State and Abortions Performed for State Residents in 2000 and 1996, by Data Source: Illinois

	IDPH	CDC	AGI
2000 Total	45,884	45,884	63,690
2000 IL residents	40,754	41,815	-
1996 Total	53,613	53,613	69,390
1996 IL residents	49,457	-	-

According to IDPH, nearly ten percent of Illinois residents obtaining abortions in 2003, were married, more than a quarter were age 30 or older, and nearly a third were 20-24 years old; more than half were performed for women in their twenties. According to data reported by the CDC for 2001, 16.7 percent of women who obtained abortions in Illinois were either married or separated.

Using the total number of abortions performed in Illinois in 2001, CDC states that there were 253 abortions per 1,000 live births and 17 abortions per 1,000 women aged 15 to 44. Both the abortion rate and ratio have declined since 1996 when the ratio was 293 abortions per 1,000 live births and the rate was 20 abortions per 1,000 women aged 15 to 44. Despite this decrease, both the ratio and rate are higher than the national averages of 234 and 15 per 1,000, respectively. Excluding the 9.8 percent of non-residents who obtained abortions in Illinois, CDC reports that there were 231 abortions per 1,000 live births and 15 abortions per 1,000 women aged 15 to 44.

AGI reported that the abortion rate in 2000 was 23.2 abortions per 1,000 women aged 15 to 44, an eight percent decrease from the 1996 rate of 25.3 per 1,000. Illinois' rate is higher than the Midwest average of 15.9 and the US rate of 21.3 abortions per 1,000 women aged 15 to 44 in 2000.

Age	Number of Abortions Obtained by IL Residents IDPH 2003	Percent of Abortions Obtained by IL Residents IDPH 2003	Percent of Total Abortions Performed in IL, CDC 2001
0-14	287	0.7%	0.7%
15-19	6,862	17.7%	19.0%
20-24	12,063	31.2%	32.1%
25-29	8,968	23.2%	22.4%
30-34	5,931	15.3%	14.3%
35-39	3,173	8.2%	7.9%
40-44	1,167	3.0%	2.8%*

*Percent for women aged 40+

Fetal Deaths. There were 1,611 fetal deaths in 2000 and 1,387 in 2002, resulting in rates of 7.4 and 6.5 fetal deaths per 1,000 live births and fetal deaths in 2000 and 2002, respectively. Females aged 10 to 49 experienced 44.32 fetal deaths per 100,000 women in 2000; this rate dropped to 37.9 per 100,000 women in 2002. Two-thirds of all fetal deaths occur to women aged 20 to 34. Over half of all fetal deaths occurred to White women. White women experienced a slight decline in the fetal mortality rate over this time period, dropping from 6.0 to 5.7 fetal deaths per 1,000 live births and fetal deaths in 2000 and 2002, respectively. In contrast the fetal mortality rate for Black women was consistently about twice as high as White women, dropping from 12.9 to 10.0 live births and fetal deaths in 2000 and 2002. The fetal mortality rate for Hispanic women per 1,000 declined as well, moving from 7.6 to 6.4 per 1,000 live births and fetal deaths in 2000 and 2002.

Live Births. Information about live births is presented below, under "Infants."

Other Indicators of Morbidity

Hospital Discharge. Among Illinois women aged 15 to 44, the most common hospital discharge Diagnostic-Related Group (DRG) for 2000-2003 inclusive was uncomplicated vaginal delivery (31.6%). The next most common DRGs are uncomplicated cesarean delivery, psychoses, and complicated vaginal delivery. When delivery related codes are excluded, psychoses are the most commonly reported discharge code, followed by other antepartum diagnoses, and uterine and adnexa procedures for non-malignancy (both with and without complications).

Cancer. Breast cancer was the most commonly diagnosed cancer among Illinois females, accounting for more than 30 percent of 386,298 invasive cancer diagnoses over 1986-2000. The predominance of breast cancer among females persists for all major race and ethnicity groups studied (Whites, Blacks, and Asian/Other races as well as Hispanic and Non-Hispanic women). The proportion of cases reported in earlier stages is increasing, suggesting better screening and early detection. Very large proportions of women reported having a mammogram within the past year. For several years (1999 to 2001) between 85 percent and 90 percent of women responding to the BRFSS, regardless of race, reported a recent screening. Similarly large proportions were

observed across all age categories over 40 years of age during the same time period. There was some variation in screening rates among different income groups, with 90 percent of women whose incomes are greater than $50,000 reporting having a mammogram in the past year as compared to 84 percent in the lower income categories (BRFSS, 2001).

Separate data collection for Clinical Breast Exams through the Family Planning data system began in 2003, thus data are incomplete. Using the number of extended exams as a guide, 93,984 extended exams and clinical breast exams were performed at Title X clinics in 2003.

Cervical Cancer Screening. Consistently, over 93 percent of Illinois women have had a Pap smear (BRFSS 1999 – 2003). Among women who have had a Pap smear, 77 percent had one in the past year. Black women were more likely to have had a Pap smear in the past year than non-Black women (83 percent versus 76 percent). Other factors related women having had a Pap smear within the past year were age less than 65, higher education level, higher household income, and those with a health insurance plan. For calendar year 2003, 97,695 Pap tests were performed at Title X clinics.

Mortality

Maternal Mortality. Between 1987 and 1996 Illinois' maternal mortality ratio was 7.5 per 1,000 live births, compared to 7.7 for the nation. In 2000, Illinois' maternal mortality ratio was 10.3 per 1,000 live births, slightly higher than the national rate of 10.0 per 1,000 live births. Marked racial and ethnic disparities exist: whereas White women experienced 7.0 deaths per 1,000 live births, Black women experienced 23.3 deaths and Hispanic women experienced 10.2 deaths. Maternal deaths were defined as deaths that occurred during pregnancy or within 42 days after pregnancy termination, regardless of pregnancy duration and site, from any cause related to or aggravated by the pregnancy, but not from accidental or incidental causes.

Mortality. Between 1998 and 2002, the number one cause of death for women aged 15 to 44 in Illinois was cancer, followed by unintentionally injury, heart disease, homicide, and suicide. While the rates of death from unintentional injury, homicide, and suicide were unchanged over this five-year period (15 deaths per 100,000 for unintentional injury, and approximately four deaths per 100,000 for homicide and suicide), the death rates from cancer and heart disease among this age group declined. Breast cancer was the second leading cause of death following lung cancer among Illinois females of all races in 2000. The rate of death was greater among Black females (40.4/100,000) than White females (28.5/100,000). For Hispanic women the rate of death was 16.1/100,000. The rate of cancer death declined from 21.9 to 18.8 per 100,000, and the mortality rate from heart disease declined from 11.1 to 9.1 per 100,000. These decreases do not necessarily imply that the overall mortality rate from these causes has decreased, rather that the rate among this specific age group has decreased.

For women in this age group, the number one cause of unintentional injury death is motor vehicle crashes (MVCs), accounting for 56 percent of such deaths. Poisonings account for nearly a third of injury deaths (32%), falls account for a small portion (3%), and other causes make up the remainder (9%).

It is noteworthy that the top five causes of death for women of reproductive age vary by race. In 2002, the major causes of death for White women include cancer, unintentional injury, heart disease, suicide, and homicide. For Black women, the top causes of death are cancer, heart disease, unintentional injury, homicide, and HIV.

In summary, the needs assessment demonstrates a significant racial disparity in health status between African-American and Caucasian women, and a lesser but marked disparity between Hispanic and non-Hispanic women. Compared to Caucasian women, African-American women are:

1. Less likely to be aware of the importance of consuming folic acid or taking a daily vitamin with folic acid;
2. More likely to contract a sexually-transmitted infection;
3. More likely to contract HIV and develop or die from AIDS;
4. More likely to become pregnant and to have an unintended pregnancy;
5. Less likely to begin prenatal care in the first trimester of pregnancy and more likely to obtain no prenatal care;
6. Less likely to smoke or consume alcohol;
7. More likely to receive thorough prenatal health education;
8. More likely to be unmarried at the time of giving birth;
9. More likely to give birth prematurely
10. Less likely to initiate breast feeding; and
11. More likely to die from a pregnancy-related cause

Further, compared to Caucasian women, women of Hispanic descent are:

1. More likely to be impoverished;
2. More likely to speak a language other than English;
3. More likely to become infected with Gonorrhea or Chlamydia;
4. More likely to have a baby;
5. Less likely to begin prenatal care in the first trimester of pregnancy;
6. More likely to receive no prenatal care;
7. More likely to be unmarried at the time of giving birth;
8. More likely to give birth prematurely;
9. Equally likely to breast feed;
10. Somewhat more likely to die from a pregnancy-related cause; and
11. Less likely to die during the child-bearing years

Infants

In 2003, 183,393 infants were born in Illinois. The number of births in Illinois decreased from nearly 191,000 in 1992 to just over 180,000 in 1997; the total number of births has remained between 180,000 and 185,000 since 1997. Illinois accounts for 4.5 percent of the nation's births. In 2003, 3.9 percent of all births were multiples and 0.9 percent were higher-order multiples (triplets or more).

Like the overall population, the majority of births in Illinois are to White mothers. In 2003, 55 percent of births were to non-Hispanic White women, 17 percent to non-Hispanic Black women, five percent were to non-Hispanic Asian / Pacific Islanders or Native Americans/Native Alaskans, and 23 percent to Hispanic women of any race. With respect to births to minorities, the proportion of births to Black women has decreased steadily but the proportion to Hispanic women has increased. In 1997, Black women accounted for 20 percent of all births, and Hispanic women accounted for 18 percent. Hispanic women have accounted for the largest proportion of minority births in Illinois since 1999.

Insurance. Data from Illinois PRAMS in 2002 indicated that 96 percent of infants had health insurance shortly after birth. Whereas a majority of White infants had private insurance/HMO (57.5%) and a smaller proportion had public insurance (42.7%), the opposite was true for Black and Hispanic infants. Approximately 80 percent of Black (81.1%) and Hispanic (79.6%) infants had public insurance (Medicaid or SCHIP) and just under a quarter (24.2 % Black, 22.8 % Hispanic) had private insurance/HMO. Respondents were allowed to indicate multiple sources of insurance.

Primary Care. In FFY 2003, 93.8 percent of Title XIX and 69.2 percent of SCHIP enrollees had an EPSDT visit before their first birthday. In March 2005, 80 percent of infants enrolled in WIC had at least three well-child visits before their first birthday. According to data from Illinois PRAMS, 98 percent of infants born in 2002 received a well-child visit in the early postpartum period.

Immunization. According to the 2003 National Immunization Survey (NIS), more than 90 percent of one-year-olds in Illinois had received three doses of diphtheria, tetanus and pertussis vaccine, two doses of Polio vaccine, two or more doses of Haemophilus influenza B vaccine, and two or more doses of Hepatitis B vaccinations. Compliance was lower for measles, mumps and rubella (40%) and for Varicella (46%) vaccinations. Among WIC-enrolled children born in 2004, 88.4 percent had completed the 3:2:2 vaccination series, up from 81 percent of infants born in 2002.

Early Childhood Caries. The IDPH Division of Oral Health is currently using data on the prevalence of severe early childhood caries (formerly "baby bottle tooth decay", or BBTD) collected in three studies conducted in 1992 and1994. The first and second determined 17 and 15 percent prevalence of BBTD, respectively, experienced by Head Start children statewide. The third found 11 percent in Chicago metropolitan area daycare sites.

Metabolic Disorders. According to the Illinois Department of Public Health, there were 254 infants up to age one who were identified with a metabolic disorder in 2004. The number of identified disorders decreased between 2000 and 2001, but increased in 2002 in part because screening for other amino acid disorders, fatty acid oxidation disorders, and organic acid disorders began July 1, 2002. Infants of different racial or ethnic backgrounds have different profiles of certain metabolic disorders. Whites accounted for 65 percent of Phenylketonuria cases, 40 percent of primary hypothyroidism cases, and 68 percent of fatty acid oxidation disorders in 2004. In contrast, Black infants experience few cases of these disorders, but accounted for 87 percent of sickling hemoglobinopathies in 2004.

Hearing loss. The State of Illinois mandates that all newborns must have a hearing screening and if needed, a rescreen, prior to being discharged from the hospital. The following data are based on those children born during the calendar years of 2003 and 2004, the first and second years of mandated reporting. In 2003, 98 percent of all newborns received a hearing screening before discharge; 99 percent of infants were screened before discharge in 2004. Fifty-six percent of infants requiring follow-up testing received at least a follow-up outpatient screening by 3 months of age in 2003, while 68 percent requiring follow-up testing received at least a follow-up outpatient screening by 3 months of age in 2004. The program's 2003 hospital summary report indicated that of the newborns reported by Illinois hospitals, 98 percent were screened, 96 percent passed and four percent were referred for further evaluation. After outpatient testing, overall a total of 1,055 infants were reported as recommended for evaluation; over one-third (420 infants or 40%) had normal hearing; and 97 infants had confirmed hearing loss. The program's 2004 hospital summary report indicated that of the newborns reported by Illinois hospitals, 99 percent were screened, 96 percent passed, and four percent were referred for further evaluation. For 2003, IDPH reported that the average age of diagnosis was 4.7 months, with a median age of 3.5 months. In 2004, this improved to an average age of diagnosis of 4.0 months, with t median age of 2.9 months.

Low Birth Weight. The 2003 Illinois' low birth weight rate of 8.3 percent has risen three-tenths of a percent since 1999. This increase was seen in the White (6.5 % to 6.9 %) and Black (14.3 % to 14.5 %) populations. The Hispanic low birth weight rate remained constant over this time period at 6.4 percent. Racial disparities had decreased slightly between 1999 and 2003. The Black:White low birth weight ratio was 2.2:1 in 1999 and 2.1:1 in 2002.

The low birth weight rate among infants born during 2003 to women who were eligible for Medicaid was 9.3 percent. The benefit of participation in the WIC and Family Case Management programs is illustrated by its effect on low birth weight. The low birth weight rate among program participants was 8.1 percent in 2003. The low birth weight rate in 2003 among the infants born to Medicaid-eligible women who did not participate in either program was 13.4 percent, 39 percent higher than the rate among program participants and 30 percent higher that the rate for the entire population

Low Birth Weigh and Multiple Births. Examination of singleton and multiple births for the whole population and by race shows that the state's low birth weight rate has remained level in recent years due to two offsetting trends. The percentage multiple births increased by 16 percent since 1997 while the percentage of singleton births decreased by 0.6 percent. The increase in multiple births has occurred mainly among Caucasians, among whom the number of multiple births has increased by 18 percent since 1997. Among African-American women, who are over-represented among the pregnant women served by major public health programs, the number of live births has decreased by 11 percent and the number of multiple births has increased by four percent since 1997. In 2002 there were fewer singleton births for Non-Hispanics and slightly more multiple births for African-Americans, Caucasians and Non-Hispanics.

These patterns are reflected in the state's low birth weight rate. The overall low birth weight rate varied between 7.9 percent and 8.2 percent from 1997 through 2003. The low birth weight rate among African-American singleton infants remained the same, while the low birth weight

rate among African-American multiple births increased by two percent. The low birth weight rate among Caucasian singletons increased by two percent while the low birth weight rate among Caucasian multiple births increased by almost five percent.

In 1997, 45 percent of low birth weight infants were singleton deliveries to Caucasian mothers, 33 percent were singleton deliveries to non-Caucasian mothers, and 17 percent were multiple deliveries to Caucasian mothers. By 2003, the proportion of low birth weight due to Caucasian singleton deliveries had decreased to 45 percent (a 2 % drop), the proportion due to Caucasian multiple deliveries had increased to 20 percent (a 15 % increase), and the proportion due to non-Caucasian singleton deliveries had remained at 30 percent. The number of triplet and higher plural births has been steadily increasing in Illinois, rising from 240.2 per 100,000 live births in 1997 to 274.1 per 100,000 live births in 2003, a 12 percent increase in five years. While the Department's efforts to reduce low birth weight and infant mortality have been effective, especially with African-American women, the increase in multiple births to Caucasian mothers, which may represent the use of fertility treatments, has offset this improvement and kept the overall low birth weight rate nearly unchanged.

Adverse Pregnancy Outcome Surveillance. Each year in Illinois, IDPH's Adverse Pregnancy Outcomes Reporting System (APORS) obtains information on the number of cases and observed rates of different neonatal conditions that make up the APORS case definition 1998-2003. The observed rates may be substantially lower than true rates because APORS does not collect birth defect information from miscarriages or elective abortions. Also, in 2002, a change in data collection methods took place resulting in an increase in the number of birth defects identified.

Based on data from 2003, 4,838 infants up to one year of age were identified as having a birth defect for a rate of 265.3 cases per 10,000 births. The most common type of defect was cardiovascular (2,388), composed mostly of patent ductus arteriosus, atrial septal defects, and ventricular septal defects. Rounding out the top five defects are genitourinary defects (788), musculoskeletal defects (611), central nervous system defects (287), and chromosomal defects (284): these five groups account for 90.0 percent of all reported birth defects. Because of its size, the number of cardiovascular defects identified has a marked influence on the total number of defects reported in a given year. Over this time period a decrease in the number of central nervous system and gastrointestinal defects was seen, but an increase in the number of cardiovascular and genitourinary defects was seen at the same time.

Illinois Birth Defects Surveillance, 1999 through 2001
Number of Cases and Rate per 10,000 Births for Select Defects

	1999		2000		2001		2002		2003	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
CNS	321	17.6	306	16.5	254	13.8	272	15.6	287	15.7
Cardiovascular	1,932	106.1	2,508	135.6	2,063	112.1	2,156	119.4	2,388	130.9
Oro-facial	181	9.9	234	12.7	190	10.3	221	12.2	225	12.3
Gastrointestinal	240	13.2	201	10.9	125	6.8	162	8.9	125	6.9
Genitourinary	434	23.8	626	33.8	516	28.0	694	38.4	788	43.2
Musculoskeletal	357	19.6	483	26.1	383	20.8	479	26.5	611	33.5
Chromosomal	278	15.3	310	16.8	258	14.0	276	15.3	284	15.6
TOTAL	3,844	211.2	4,762	257.4	3,879	210.8	4,397	241.1	4,838	265.3

Birth defects were the leading cause of infant mortality in the United States in 2002, making up more than 20 percent of infant deaths. Birth defects also contribute substantially to childhood morbidity and long-term disability. More than 21,700 major birth defects, identified in Illinois newborns between 1999 and 2003, were reported to APORS – a rate of 237.6 per 10,000 live births. In Illinois, heart and circulatory system defects are the most commonly identified; 50.9 percent of all reported major birth defects are heart or circulatory defects. Some serious heart defects are asymptomatic at birth, with symptoms developing days or weeks later. An infant who has been discharged before the onset on symptoms would not be included in the APORS database and may impact the incidence rate of congenital cardiovascular defects in newborns.

Substance-Exposed Infants. According to child abuse and neglect statistics prepared by the Illinois Department of Children and Family Services, investigation had revealed credible evidence that 1,061 infants were exposed to substances in SFY 2003; 66 percent of these cases occurred in Cook County. Substance exposed infants are those whose blood, urine, or meconium at birth contained any amount of a controlled substance, as defined by Section 102 of the Illinois Controlled Substance Act, or a metabolite of a controlled substance (except for medicine administered to the mother or newborn). This number represents a slight increase from the SFY 2003 total of 1,000 cases, but remains lower than the number of cases in SFY 2001 and SFY 2002 (1,198 and 1,147, respectively).

Fetal Alcohol Syndrome. Between 1998-2002, 170 cases met the ICD-9-CM Code (760.71) definition for FAS, resulting in an incidence rate of 1.9 per 10,000 live births (95 % confidence interval to 1.6 to 2.2). Sixty percent (102 cases) were reported in Cook County, followed by Champaign, Vermilion, and St. Clair Counties, reporting the next largest number of cases (10, 9, and 8, respectively). The remainder of the counties had less than six cases during 1998-2002.

Hospitalization. For 2000 through 2003, the most common Diagnostics- Related Group (DRG) listed for infant hospital discharge was normal newborn, accounting for nearly two-thirds of all discharges (64.9%). Excluding all diagnoses related to birth, the most common discharge group for infants in Illinois was bronchitis and asthma; this is the code that accounts for the fifth highest number of discharges even when birth is included. Other non-birth discharge codes indicate that infants are admitted to hospital for simple pneumonia and pleurisy; viral illness and fever of unknown origin; esophagitis, gastroenteritis and miscellaneous digestive disorders; and nutritional and miscellaneous metabolic disorders.

Life Expectancy at Birth. Using the 2000 Census and Illinois death files from 1999 through 2001, the estimated life expectancy at birth in 2000 was 76.8 years for all infants, 74.0 years for male infants and 79.5 years for female infants. White males born in 2000 were expected to live 75.1 years, White females 80.3 years, Black males 66.5 years, and Black females 74.3 years. Life expectancy in Illinois is generally similar to that of the United States as a whole, but life expectancy for Black males born in Illinois in 2000 is nearly two years less than that of Black males nationwide (66.5 years in IL vs. 68.2 years for the US).

Mortality. Illinois' infant mortality rate (IMR) has steadily declined from 8.4 deaths per 1,000 live births in 1996 to 7.2 deaths per 1,000 live births in 2002[4]. The IMR for White infants

[4] The most recent data available at the time of publication

decreased from 6.3 to 5.2 deaths per 1,000 live births during this time, and the IMR for Black infants decreased from 17.1 to 15.7 deaths per 1,000 live births. The Black IMR in 2002 is a slight increase from the rate of 14.9 in 2001. The Black: White IMR ratio was 2.7:1 in 1996 and increased to 3.0:1 in 2002. The perinatal mortality rate decreased between 1998 and 2002, declining from 12.2 per 1,000 live births and fetal deaths in 1998 to 11.3 per 1,000 events in 2002.

Congenital anomalies and short gestation are the two causes of infant mortality that account for the majority of deaths; in 2002, the rate of death for each of these two causes was 1.5 per 1,000 live births. Both of these causes result in higher race specific IMRs for Black infants than for White infants. In 2002, there were 1.4 White vs. 2.2 Black deaths per 1,000 live births due to congenital anomalies, and 1.0 White vs. 4.7 Black deaths per 1,000 live births due to short gestation. Statewide, the rate of SIDS death decreased from 0.88 to 0.44 per 1,000 live births between 1998 and 2002. The rate of death due to maternal complications increased from 0.37 to 0.47 deaths per 1,000 live births.

Using unmatched files, the neonatal mortality rate (NMR, within 28 days of birth) for White and Hispanic infants are identical: 3.9 per 1,000 live births in 2002. Rates for both these groups decreased slightly from 4.4 (White) and 4.1 (Hispanic) per 1,000 live births in 1998. The Black NMR also decreased between 1998 and 2002, from 10.1 to 9.6 per 1,000 live births. The Black:White NMR ratio is 2.46:1. The postneonatal mortality rate (PNMR, 28 – 364 days after birth) showed a greater decrease over this time, but a similar racial disparity exists. The White PNMR decreased from 1.9 to 1.6 deaths per 1,000 live births, the Hispanic PNMR decreased from 2.4 to 1.8, and the Black PNMR decreased from 6.7 to 6.0 deaths per 1,000 live births. The Black:White PNMR ratio is 3.75:1.

Using data from 2001,[5] the top five causes of neonatal death were short gestation and low birth weight, congenital anomalies, complications of pregnancy, respiratory distress, and complications of placenta and membranes. In contrast, the top five causes of postneonatal death were SIDS, congenital anomalies, unintentional injury, circulatory disease, and homicide. Whereas the causes of neonatal death primarily revolve around maternal health and prematurity, three of the five key causes of postneonatal death are at least partially preventable: SIDS, unintentional injury, and homicide.

The infant mortality rate among Medicaid-eligible infants was 7.7 per 1,000 in 2001 (the latest data available). This rate is significantly influenced by participation in the Family Case Management and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) programs. The infant mortality rate among infants born to Medicaid-eligible women who participated in both programs during pregnancy was 5.8 per 1,000 in 2001 (less than the rate for the entire population) and was 16.2 per 1,000 live births among Medicaid-eligible pregnant women who did not participate in either program. Most (84 %) Medicaid-eligible pregnant women participated in either or both the Family Case Management and WIC programs in 2001.

SIDS. Although the rate of SIDS deaths in Illinois has decreased between 1998 and 2001, a significant racial disparity still persists. Between 1998 and 2001 the White SIDS death rate

[5] The most recent data available at the time of application.

dropped from 0.48 to 0.21 deaths per 1,000 live births. Over the same time period, the SIDS death rate for Black infants dropped from 2.04 to 1.24 deaths per 1,000 live births. Despite the decreases in the SIDS death rate for both races, the Black: White ratio remains the same in 2001 as it did in 1998 at 4.25:1. While Illinois is making progress in this area, more work will be required to achieve the *Healthy People 2010* goal of 0.25 SIDS deaths per 1,000 live births.

Infant Sleep Position. Despite several educational campaigns, the prevalence of infants sleeping in the non-supine position remains relatively high in Illinois. According to 2002 data from PRAMS, only 63.6 percent of Illinois infants are put to sleep exclusively on their backs. Women with the highest rates of putting their infant to sleep on their stomach are those under age 25, Black women, and Non-Hispanic women.

Summary. The pattern of racial disparity in health status continues among infants. The most significant health problems among infants are low birth weight and prematurity and their contribution to neonatal mortality. Racial disparities between African-American and Caucasian infants in these health problems are particularly marked, as is the disparity in Sudden Infant Death Syndrome. Nearly all (90%) cases of HIV infection in young children are the result of perinatal transmission (see below) and nearly three-fourths of these cases occur among African-American infants. On the other hand, screening for metabolic disorders and hearing loss are nearly universal, the rates of insurance coverage, use of primary health care and immunization are relatively high.

Infant Sleep Position – Illinois PRAMS, 2002			
	Side	**Back**	**Stomach**
Age			
<20	15.0%	50.2%	18.9%
20-24	19.2%	56.3%	14.4%
25-34	17.9%	66.1%	10.9%
35+	13.4%	76.3%	7.0%
Race			
White	16.2%	69.0%	10.3%
Black	21.3%	38.9%	21.3%
Other	19.7%	62.4%	7.9%
Ethnicity			
Hispanic	25.0%	58.0%	5.4%
Non-Hispanic	14.7%	65.2%	14.2%
TOTAL	**17.2%**	**63.6%**	**12.1%**

Children and Adolescents (ages 1-24)

The United States Census Bureau estimates that there were 4,485,133 individuals under age 25 in Illinois as of July 1, 2003. More than one-third of the population (35.4%) was made up by these individuals (886,515 aged 0-four, 886,685 aged five to nine, 926,640 aged 10 to 14, 885,237 aged 15-19, 900,056 aged 20-24). The population under age 25 has grown 0.6 percent between 2000 and 2003.

Morbidity and Mortality

Hospitalization. Between 2000 and 2003, the top causes of hospitalization for children aged 1 to 4 years were bronchitis and asthma; simple pneumonia and pleurisy; nutritional and miscellaneous metabolic disorders; esophagitis, gastroenteritis and miscellaneous digestive disorders; and seizure and headache. Among these young children, the reasons for hospitalization are similar for males and females.

For children age five to 14 years, while many of the causes of hospitalization are similar, gender differences begin to appear. For females, the top causes of hospitalization are psychoses[6]; bronchitis and asthma; esophagitis, gastroenteric and miscellaneous digestive disorders; simple pneumonia and pleurisy; appendectomy without complicated principal diagnosis w/o cc; and nutritional and miscellaneous metabolic disorders. Among males, the top causes are psychoses; bronchitis and asthma; childhood mental disorders; simple pneumonia & pleurisy; appendectomy without complicated principal diagnosis w/o cc; and esophagitis, gastroenteric, and miscellaneous digestive disorders.

Gender differences are most apparent among 15 to 24-year-olds. Five of the top six discharge groups for females relate to pregnancy, labor, and delivery: vaginal delivery without complicating diagnoses; cesarean section w/o cc; psychoses; vaginal delivery with complicating diagnoses; other antepartum diagnoses with medical complications; and other antepartum diagnoses without medical complications. Among males, three of the top six discharge groups include mental health issues: psychoses; appendectomy without complicated principal diagnosis w/o cc; depressive neuroses; diabetes; red blood cell disorders; and alcohol/drug abuse or dependence without rehabilitation therapy w/o cc.

Health Insurance and Healthcare Utilization

Using data from the Illinois Department of Public Aid, there were 1,177,705 children enrolled in Medicaid or KidCare in FFY 2004. Each of Illinois' 102 counties has seen an increase in enrollment since FFY 1999 when state enrollment was only 960,375 individuals. In 2003, Illinois expanded KidCare eligibility to include children in families with incomes up to 200 percent of the federal poverty level.

Using data from the CPS, the Kaiser Family Foundation's *Commission on Medicaid and the Uninsured* reported that 10.9 percent of children under the age of 18 in Illinois were uninsured at some point in 2002-2003. While this figure is below the national average of 11.9 percent, significant variation exists by income level. Whereas 20.2 percent of children whose family income is less than 200 percent of the federal poverty level (FPL) were uninsured, that was true of only 7.2 percent of children whose families were between 200 and 399 percent FPL, and only 1.9 percent of children whose families were at least 400 percent of the FPL. The proportion of poorer families (less than 200 % FPL) with uninsured children has decreased from 25.1 percent in 1997-1999.

[6] The Diagnosis Related Group "Psychoses" includes the ICD-9 range 295.00 through 299.91 as the primary diagnosis.

Statewide there are 2,348 pediatricians that accept Medicaid or KidCare as payment sources. Over half of these providers are located in Cook County (1,177), most of which are located in Chicago (778); 25 counties lack pediatricians who accept these clients and a further 50 counties have five or fewer pediatricians who accept Medicaid or KidCare.

Early Intervention. As of December 2004, 2.8 percent of the state's 0 to three-year-olds were enrolled Part C of the Individuals with Disabilities Education Act (Early Intervention services). This is a large increase from the participation rate of 1.8 percent in April of 2000. Although available to all children under age three, the majority of EI participants are between ages two and three (55%); the racial and ethnic composition of the EI population mirrors that of the state population. As of December 2004, 86 percent of three-year-olds who participated in EI children are transitioned to Part B or referred to other services.

Because of the young age of participants, EI providers are reluctant to assign diagnoses to them; for many children, the assistance received through EI will be sufficient to address their delay. KidCare data from 2003 indicate that 19,116 children under the age of 21 were diagnosed with a developmental delay; this represents 2.3 percent of children served by KidCare. The three most common types of delay diagnosed were unspecified lack of normal physiological development, learning difficulties, and speech/language disorders. Most of these children are between ages 0-9 years (45 percent under age six, 26 percent between six and nine years). In 2003, 58 percent of EI participants were eligible for KidCare.

Vision and Hearing Screening. Screening tests to identify vision problem are mandated for preschoolers age 3 to five, Kindergartners, and children in the second and seventh grades. In state fiscal year 2004, of the 1,181,150 children screened, 11 percent were referred for treatment. Of children who currently wear glasses, 15 percent were referred for follow-upon based upon problems with their glasses (i.e. the glasses were in bad condition or their prescription was not up-to-date). Illinois mandates hearing screening for children between 3 and 5 years of age, for children in Kindergarten through third grade, and for children enrolled in special education. In SFY 2004 1,252,119 children were screened and one percent were referred for treatment. All of the 9,105 children with known hearing loss were given monitoring exams.

Lead Screening. According to the Illinois Department of Public Health's Childhood Lead Poisoning Prevention Program, 267,997 children were screened for lead in 2003. Forty-two percent (42.17%) of those children screened live in Chicago. Among children screened, 13,187 had blood lead levels above 10mcg/dL (4.91%) and 4,536 had blood lead levels above 15mcg/dL (1.69%). Nearly two-thirds of children with blood lead above 15mcg/dL live in Chicago (62.1%). The number of children screened with blood lead levels above 15mcg/dL has decreased markedly since screening was mandated in 1993. In 1993, 23,068 children had elevated blood lead levels (i.e., ≥ 15mcg/dL); there were 17,889 such children in 1996 (22.45 % decrease since 1993); 8,263 in 2000 (53.8 % decrease since 1996); and 4,536 in 2003 (45.1 % decrease since 2000). The overall decrease from 1993 to 2003 was 80.3 percent in screened children with elevated blood lead levels (i.e., ≥ 15mcg/dL).

Immunization

The state uses the 4:3:1:3 series as a performance measure for children enrolled in KidCare and WIC. Data indicate that 76.4 percent of two-year-old KidCare enrollees in 2004 had completed this vaccination series, up from 40.1 percent in 1999. Among WIC participants, 76.4 percent of two-year-old enrollees in 2004 had completed this series, up from 56 percent in 2001.

Estimated Vaccination Coverage Among Children 19-35 Months of Age by Race/Ethnicity, National Immunization Survey, 2003								
	Total		**Non-Hispanic White**		**Non-Hispanic Black**		**Hispanic**	
	USA	IL	USA	IL	USA	IL	USA	IL
4:3:1	82.2%	84.9%	85.0%	86.8%	76.7%	NA	79.3%	86.8%
4:3:1:3	81.3%	84.6%	84.3%	86.8%	75.2%	NA	78.7%	86.6%
4:3:1:3:3	79.4%	82.9%	82.5%	85.7%	73.0%	NA	77.0%	82.7%
4:3:1:3:3:1	72.5%	69.1%	73.9%	67.7%	68.4%	NA	71.3%	71.9%

Nutrition and Overweight

Stature, Underweight, and Overweight. Using data from the 2002 Pediatric Nutrition Surveillance System (PEDNSS), 7.1 percent of children under the age of five were considered to be of short stature (less than the fifth percentile). The proportion with short stature ranged from 5.5 percent of individuals of Other race to 9.6 percent of Non-Hispanic Black children. On a positive note, the proportion of children considered short in stature is smaller than it was in 2001, when 8.5 percent of children were classified this way. The proportion of children considered underweight (less than the fifth percentile) has increased slightly in the past two years, from 4.2 percent in 2001 to 4.4 percent in 2003. Each racial and ethnic group has seen an increase in the proportion of children classified as underweight, except for individuals of Other race who saw a small decline (5.1 percent in 2001 to 4.9 percent in 2003). At the same time, the proportion of children in PEDNSS considered overweight (greater than the 94th percentile) has decreased from 14.2 percent in 2001 to 13.1 percent in 2003. The highest rate of overweight was found among Hispanic children (16.0%), several percentage points higher than the proportion of non-Hispanic Black (12.3%) and non-Hispanic White (11.3%) children considered overweight.

For children aged 3 and 4 years, 15.3 percent had a weight between the 85th and 94th percentile for their height, and a further 14.0 percent had a weight at or above the 95th percentile for their height. Both these proportions have decreased since 2001 when 16.5 percent of children had a weight between the 85th and 94th percentile and 12.6 percent had a weight at or above the 95th percentile. In both categories, Hispanic children had the highest rate of being overweight.

Among WIC-enrolled children between age 2 and 5, nearly 30 percent are considered either overweight (15.3%) or obese (14%). This rate has been essentially stable since 1999. Given that having an overweight parent is a risk factor for childhood overweight and obesity, maternal BMI among WIC participants was also obtained. In 2004, nearly half of all mothers participating in WIC were either overweight (25.4%) or obese (22.8%). The rate of overweight and obesity

among mothers on WIC has increased from 24.5 percent overweight and 20.8 percent obese in 2000.

Anemia. According to data from the 2003 PEDNSS, 10.9 percent of children under the age of 5 in the WIC program were considered anemic based on low hemoglobin or hematocrit, a decrease from a rate of 12.6 percent in 2001. Non-Hispanic Black children had the highest rates of anemia at 15.7 percent, compared to 9.2 percent of Hispanic children and 9.3 percent of non-Hispanic White children.

Adolescent Overweight, Obesity, Nutrition and Physical Activity. Because true population estimates of adolescent overweight and obesity are lacking, we are only able to present pre-pregnancy BMI data for teenagers enrolled in WIC. While in 2000 17.9 percent of teen mothers aged 12-17 were overweight and 8.2 percent were obese, these numbers rose to 19.3 percent and 9.5 percent, respectively, by 2004. Among teen mothers aged 18-19, 20.3 percent were overweight and 13.1 percent were obese in 2000; these numbers rose to 21.6 percent and 14.6 percent, respectively, by 2004. While state-level data from the newest administration of the National Health and Nutrition Examination Survey (NHANES) are not yet available, national data indicate that 16 percent of 12-19 year olds were considered overweight or obese in 1999-2002, up from 11 percent in 1988-1994. Although only available for a limited subset of the population, the WIC data presented here indicate that the trends seen in Illinois mirror those of the nation as a whole. All of these figures are well in excess of the *Healthy People 2010* goal that no more than five percent of youth should be overweight.

According to the 2001 and 2003 Youth Risk Behavior Surveillance (YRBS), nearly 15 percent of the Chicago Public School[7] system's high school population is overweight, an additional 18-19 percent are at risk of becoming overweight, and up to 21 percent did not participate in vigorous or moderate physical activity. *Healthy People 2010* has set a goal that 85 percent of 9^{th}-12^{th} graders will participate in vigorous physical activity at least three times a week – this was only true of 46.3 percent of Chicago Public School (CPS) students in 2003. Unfortunately, Illinois has not had weighted statewide YRBS data since 1995, and consequently little is known about the health of Illinois high school students on topics other than alcohol, tobacco, and other drug use.

[7] The Chicago Public Schools receive funding directly from the U.S. Centers for Disease Control and Prevention to conduct the Youth Risk Behavior Survey in the city of Chicago. The Statewide survey did not obtain an adequate sample size.

	Chicago PS 2001			Chicago PS 2003		
	Total	**Male**	**Female**	**Total**	**Male**	**Female**
At risk of becoming overweight	18.7%	14.6%	22.6%	17.9%	16.8%	19.0%
Overweight	12.7%	15.5%	10.1%	13.9%	16.3%	11.5%
Thought they were overweight	28.6%	22.8%	34.3%	27.4%	23.0%	31.5%
Trying to lose weight	43.6%	34.2%	52.8%	43.7%	36.4%	50.6%
Watched at least 3 hours of TV per day	58.6%	59.3%	57.6%	52.5%	52.3%	52.5%
Ate at least servings of fruit/ vegetables	29.5%	30.8%	28.0%	17.7%	20.6%	15.0%
Drank at least 3 glasses of milk	18.1%	24.6%	11.4%	10.9%	14.4%	7.7%
Participated in insufficient physical activity	30.5%	23.1%	37.7%	48.3%	40.9%	55.1%
No vigorous or moderate physical activity	11.7%	9.5%	13.9%	20.9%	17.4%	24.2%

YRBS data indicate that more high school females than males in Chicago are at risk of becoming overweight, but that more males than females are currently overweight. The proportion of high school students that think they are overweight and the proportion that report they are trying to lose weight exceed the combined proportion of students who are overweight or at risk for overweight. Nearly half of these teens did not participate in sufficient physical activity in 2003 (48.3%), up from just under one-third in 2001 (30.5%).

Over half of Chicago teens in this survey watched at least three hours of television per day, less than 20 percent ate at least five servings of fruit and vegetables a day, and approximately 11 percent consumed at least three glasses of milk per day. Males and females report consuming similar quantities of fruits and vegetables, but males report drinking more milk than females.

High School Graduation Rates. Data for the 2004 school year from the Illinois State Board of Education indicate that 86.6 percent of students graduate from high school. The graduation rate is highest for White students (91.8%) and females (88.8%), and lowest for students with limited English proficiency (57.9%). Other groups with graduation rates below 80 percent are Black students (74%), Hispanic students (75.9%), students with disabilities (75.8%), and economically disadvantaged students (71.1%). Graduation rates for the state and for most sociodemographic subgroups have been increasing or stable over the past three years, but graduation rates for economically disadvantaged students and students with limited English proficiency have decreased during this interval.

Injury and Violence

Motor Vehicle Safety. Several important vehicle safety measures have been adopted by Illinois in the past several years. Effective January 2002, the law requires that all children age 4 to 15 be properly restrained in vehicles. Effective January 2004, all children weighing less than 80 pounds must be restrained in booster seats in the back seat of vehicles. Governor Blagojevich signed the primary seat belt enforcement law in July of 2003. By June 2004, seatbelt use had increased from 76 percent to 83 percent of all motorists.

The proportion of CPS students who report they rarely or never wear seatbelts was 34.0 percent in 2001, and 16.2 percent in 2003; the proportion of students who didn't wear seatbelts exceeded 40 percent in 1997. While the proportion of Chicago students who do not engage in this protective behavior has decreased and is now on par with the national average, this behavior remains more common among adolescent males than among adolescent females. In 2003, 21.8 percent of males vs. 10.6 percent of females failed to wear seatbelts on a regular basis. Considering seatbelt use, motorcycle helmet use, and bicycle helmet use, the teenagers are least likely to wear bicycle helmets, followed by motorcycle helmets and seatbelts. The proportion of teenagers who rarely or never wear bicycle helmets exceeded 90 percent in 2001 and 2003; the proportion who reported not using helmets actually increased among students in the 2003 Chicago YRBS as compared to the 2001 survey. Fully a third of Chicago PS students reported they were a passenger in a car where the driver had been drinking in the past 30 days. These 2003 data exceed the national average and *Healthy People 2010* goal of 30 percent.

Deaths from Unintentional Injury. For children aged 5-24, the number one cause of unintentional injury death is motor vehicle collisions (MVCs). Among young children age 1-4, fires/burns (33%), drowning (22%), and MVCs (19%) are all important contributors to injury deaths. MVCs account for 52 percent of injury deaths to children aged 5-9, a proportion that increases to 69 percent among 15-24 year olds. Most children and youth involved in MVCs are between age 15 and 24, and nearly 63 percent of 15-24 year olds killed in car crashes are White males. Drowning, poisoning, and fires/burns are also important causes of deaths due to unintentional injury for 5-24 year olds in Illinois.

Child Abuse and Neglect. In State fiscal Year 2004 where were 25,341 cases of child abuse/neglect were indicated[8] by the Department of Children and Family Services (DCFS). Just under a third of indicated cases were reported in Cook County. While the state rate of reported abuse and neglect cases per 1,000 population was 26.7 for SFY2002, there were two counties whose rates were below 13 cases per 1,000 (DuPage and Monroe), and 29 counties whose rates were at least 40 cases per 1,000. In SFY 2004 there were 16,058 indicated family reports of abuse and neglect; 31.5 percent of these cases occurred in Cook County. In SFY 2004 there were 2,879 indicated cases of sexual abuse in Illinois; 28.9 percent of indicated cases were reported in Cook County and 80 percent of the victims were female. Of the 174 deaths reported to DCFS as potentially related to child abuse/neglect, credible evidence of this alleged cause of death was present in 85 cases; 42 percent of deaths with credible evidence were reported in Cook County. These data indicate that Cook County has the largest number of indicated cases of child abuse and neglect among counties in Illinois.

Fighting, weapons, and guns. Physical fighting in Illinois schools is fairly common. In 2003, 42.6 percent of CPS students reported having been in a physical fight. Data from the Illinois Youth Survey indicate that 13.5 percent of 8th, 10th, and 12th grade students said they had attacked someone with the intention of hurting them in 2002.

According to the 2001 and 2003 YRBS, a sizeable minority of students in the CPS, particularly male students, reported carrying a weapon or a gun. While 16.4 percent of Chicago females reported carrying a gun in 2001, this was true of 26.4 percent of male students in

[8] Indicated cases are those where investigation revealed credible evidence of abuse or neglect.

Chicago, and each rate declined only two percent by 2003. The proportion of students who reported carrying a gun was 1.7 percent for Chicago females in 2001 and 12.2 percent for Chicago males in 2001. While the proportion of Chicago males who reported carrying a gun decreased one percentage point by 2003, the proportion of Chicago females who reported carrying a gun increased to 3.8 percent. Chicago males and females report carrying guns more often than the national average, and Chicago females report carrying other types of weapons more often than the national average. While the proportion of all Chicago students that reported carrying a weapon at school has decreased between 2001 and 2003, the proportion of females who carry weapons at school remains unchanged while the proportion of males who report this behavior has decreased from 9.2 percent to 5.6 percent and is now lower than the female rate of 6.6 percent.

Most 15 to 24-year-old victims of homicide are Black males (63.6%). Just over a quarter of homicide fatalities occur to White males (26.1%); the remainder are equally distributed among White and Black females.

Reproductive Health

Sexual Risk Behaviors. According to the 2003 YRBS, 55.1 percent of CPS students had ever had intercourse, a slight decrease from 57.6 percent in 1999. The proportion of males who were sexually experienced was greater than the proportion of females. A similar male:female disparity is seen in the proportion of students who had their first sexual intercourse before age 13. While the total proportion was 13.2 percent for Chicago in 2003, down from 18.3 percent in 1999, the proportion of males reporting this behavior was approximately three times higher than that of females. Earlier onset of sexual activity logically increases one's opportunity to have multiple sexual partners, and the fact that males report more partners than females is thus anticipated. Nearly one-fifth (19.6%) of Chicago students reported having at least four sexual partners in 2003, a decrease from 25.1 percent in 1999. Despite the marked gender disparities seen above, the proportion of students who are currently sexually active is similar for both males and females. Overall, 42.3 percent of Chicago teens in 2003 and 42.3 percent in 1999 reported that they had had sexual intercourse in the three months preceding the survey. Generally, the above data indicate that, at least among respondents in the Chicago Public Schools, fewer teens have ever had intercourse, a smaller proportion engaged in the behavior before age 13, and thus a smaller proportion had multiple sex partners. The proportion of students who are currently sexually active remains essentially unchanged.

While current sexual activity is essentially stable, 73 percent of male and 60 percent of female Chicago students used a condom the last time they had intercourse, surpassing the national average. Use of oral contraceptives at last intercourse among Chicago females is lower than the national average: 10.4 percent vs. 20.6 percent. Despite these markers of responsible sexual activity, 20.7 percent of Chicago students in 2003 reported using alcohol or drugs the last time they had intercourse. Just under ten percent (8.9%) of Chicago teens in 2003 had either been pregnant or gotten a partner pregnant; these proportions are approximately double the national proportion.

Illinois law mandates comprehensive sex education, including STD/HIV information. Abstinence must be stressed during sex education, but contraception must be covered. When discussing STDs and HIV abstinence must be covered but nothing is specified about teaching contraception as prevention for these infections. Parents may opt their children out of this school content.

Sexually Transmitted Infections. In Illinois, as in the United States, the rate of Chlamydia infection is rising among youth; however, gonorrhea rates are decreasing. While this may be partially a function of increased screening efforts, it is nonetheless worthy of note. For both infections, Illinois rates exceed national rates. Chlamydia and Gonorrhea are far more common among teenage females in Illinois than among teenage males, and are more common among Black teens than among White teens. Whereas 19,705 cases of Chlamydia and 6,667 cases of Gonorrhea among females less than25 years old were reported to IDPH in 2003, the numbers for males were 4,889 and 3,920, respectively. While Illinois' 2003 Chlamydia rate for individuals age 15-19 is 1,815/100,000 and the rate for individuals age 20-24 is 1,997/100,000, the state rates for females and males under the age of 20 are 802.9 and 147.9 cases per 100,000, respectively. Similarly, the state's 2003 Gonorrhea rate for individuals age 15-19 and 20-24 are 687 and 796/100,000, respectively, the rate among females less than 20 is 258 and the male rate is 103/100,000. All of these Gonorrhea rates are well in excess of the *Healthy People 2010* goal of 19 cases per 100,000.

Racial disparities are also present with respect to STDs. In 2003, Black females accounted for 57 percent of all reported Chlamydia cases and 52 percent of all reported Gonorrhea cases for individuals under the age of 25. Whereas White males accounted for less than 5 percent youth Chlamydia and Gonorrhea cases, Black males accounted for 16 percent of Chlamydia and 34 percent of Gonorrhea cases. This is a significant disparity given that Blacks account for only 15 percent of the state population.

Family Planning Program Use. According to Title X Family Planning data, there were 42,650 unduplicated adolescent clients (less than 20-years-of-age) in CY 2003. These clients received over 26,000 Pap tests and over 28,000 Chlamydia and Gonorrhea tests. The majority of adolescent Family Planning users are also contraceptive users (85.5%): 47.5 percent of these contraceptive users rely on the pill, 17.7 percent rely on Depo Provera ®, and 10.5 percent rely on condoms. The Title X program estimates that 12,065 teenage pregnancies were averted through the use of its services during CY2003.

Pediatric and Adolescent HIV/AIDS. Of the 212 pediatric HIV cases (under 13 years of age) reported in Illinois between July 1, 1999 and March 31, 2005, 73 percent were reported among non-Hispanic Blacks, ten percent among non-Hispanic Whites, and 16 percent among Hispanics. Nearly 90 percent of all pediatric cases result from perinatal transmission (89%).

Of the 275 pediatric AIDS cases reported between January 1, 1981 and March 31, 2005, 63 percent are reported among non-Hispanic Blacks, 21 percent among non-Hispanic Whites, and 16 percent among Hispanics. While 90 percent of all pediatric AIDS cases resulted from perinatal transmission, nearly 20 percent of pediatric AIDS cases among Whites resulted from transfusions. Perinatal transmission accounted for 78 percent of White, 94 percent of Black, and

89 percent of Hispanic pediatric AIDS cases. Hemophilia/transfusion accounted for a small proportion of cases: 19 percent of White cases, 5 percent of Black cases, and 11 percent of Hispanic cases. In 2002, there were only 8 deaths from HIV/AIDS among all individuals aged 1-24 years.

In 2004, 15 percent of the 2,658 new HIV cases reported to IDPH occurred among 13-24 year olds. The majority of these cases were reported for non-Hispanic Black males living in Chicago. Since 2000, between 11 percent and 15 percent of newly reported HIV cases have occurred among 13 to 24-year-olds. Of the 13,117 cumulative HIV cases reported to IDPH between July 1, 1999 and March 31, 2005, 1,678 (13%) were reported among individuals age 13-24. Most of these cases (77%) were reported for 20 to 24-year-olds. Non-Hispanic Blacks account for 67 percent of female and 47 percent of male adolescent/adult HIV cases in Illinois. The most common forms of HIV transmission for adolescent/adult males are men having sex with men (56%) and intravenous drug use (16%). Among adolescent/adult females, the most common transmission routes are heterosexual intercourse (45%) and intravenous drug use (23%).

Of the 31,601 cumulative AIDS cases reported to IDPH between January 1, 1981 and March 31, 2005, five percent were reported among individuals aged 13-24; five percent of individuals living with AIDS are 13-24.

Teen Pregnancy and Teen Births. As with all states, the teenage pregnancy, birth, and abortion rates in Illinois have been steadily decreasing. The teen pregnancy rate - including pregnancies that end in birth, abortion, or miscarriage - has decreased from 112 pregnancies per 1,000 females aged 15-19 in 1988 to 87per 1,000 in 2000. Teenage birth rates are presented in the table below. While progress has been made, AGI noted that Illinois had the 20th highest teen birth rate in the nation in 2001. Considering only births to teens aged 15-17, Illinois had the 17th highest birth rate in 2002 with 23.4 births per 1,000 females of this age group.

Teenage birth rates vary by maternal race and ethnicity. In 2003, the birth rate for 15 to 19-year-old Whites was 33 per 1,000, compared to 77 per 1,000 for Black and 82 per 1,000 for Hispanic females in Illinois. While the state's White teen birth rate was below the national average, its Hispanic rates were similar, and the Black rates exceeded those of the nation.

Teenage Birth Rates (per 1,000 females), Illinois 1996-2003			
	Total	**15-17**	**18-19**
2003	40.3	22.9	66.6
2000	49.5	28.5	81.1
1998	51.8	31.9	82.4
1996	55.3	35.1	87.5

Despite their low and decreasing numbers, teenage births remain important because of the high potential for negative outcomes. Among births to teenagers less than 20 years old in 2003 in Illinois, only 68 percent initiated prenatal care in the first trimester, and only 58 percent had adequate prenatal care defined on the Kessner index. Two percent of teenage births were considered very low birth weight, compared with 1.6 percent of all births; 10.3 percent were low birth weight compared with 8.1 percent of all births. In 2001, the IMR for infants born to 10 to

14-year-olds was 17.4/1,000 (only 6 infant deaths occurred in this age group in 2001) and was 10.0 for infants born to 15 to 19-year-olds; the state IMR in 2001 was 7.2/1,000. Most teen mothers (87%) are unmarried, and 92 percent are enrolled in Medicaid. Using additional data from the 2002 PRAMS survey, 74 percent of teenage births (less than 20 years old) were the result of unintended pregnancies, 52 percent of these mothers were not using contraception when they became pregnant; in 2001, 15 percent smoked cigarettes and 2.5 percent drank alcohol during the last three months of pregnancy. The use of social assistance among this population is high – 81 percent of teen mothers and 91 percent of their infants were enrolled in WIC in 2001. In 2002, only 54 percent of teen mothers initiated breastfeeding, and less than a third were still nursing when their infant was one month of age. Despite being the recommended sleep position, only 50 percent of teen mothers usually placed their infant to sleep on its back.

Alcohol, Tobacco, and Other Drug Use

Substance Use. According to the 2002 Illinois Youth Survey (ILYS), 41.5 percent of Illinois students in grades 8 through 12 used any substance in the past month; figures range from 25 percent of 8th grade respondents to 59.1 percent of 12th grade respondents. Substance use in the past month has decreased since 1998 for males and females in Illinois, and has significantly decreased among 8th and 10th grade students. Regionally, substance use has decreased most among Cook County/non-Chicago Public School students, and among students in urban areas outside Cook County. Within Cook County, substance use has decreased among White students, but has remained stable for Hispanic and Black youth. The majority of students (77%) who used substances in the past month only used gateway drugs, defined as alcohol, tobacco, or marijuana. Of the remaining students, 19 percent used both gateway and other illicit drugs, and less than five percent used only other illicit drugs.

According to the ILYS, the mean age at first use of tobacco and alcohol has slightly increased, but the mean age at first use of marijuana has slightly decreased. On average, Illinois teens in 2002 reported having tried tobacco for the first time at 13.3 years of age, tried alcohol at 14.1 years, and began using alcohol regularly at 15.6 years. The average age at first use of marijuana was 14.6 years. Further efforts will be required to meet the *Healthy People 2010* goal of increasing the age at first use of tobacco to 14.

Alcohol. Alcohol is the drug of choice for adolescents in Illinois. According to the Illinois Youth Survey (ILYS), 35 percent of all students surveyed reported use in the past 30 days in 2002. Prevalence of use ranged from 18.9 percent among 8th graders, 36.1 percent among 10th graders, and 52.8 percent among 12th graders. In 2002, use was similar for males, females, and in geographic areas across the state. Since 1998, alcohol use among males, females, 8th grade students, 10th grade students, and 12th grade males has decreased. The prevalence of alcohol use in Illinois is comparable to national estimates for 8th and 10th graders, but use by 12th grade students in Illinois exceeds that of 12th grade students nationwide. Since 1998, alcohol use has decreased in all areas of the state except among individuals attending Chicago Public Schools, whose rates are higher than they were in 1998. With respect to binge drinking – consuming five or more drinks in one sitting – rates for 2002 in Illinois are slightly below average for 8th grade students (9.9%), average for 10th grade students (21.8%), and above average for 12th grade students (36.1%).

As shown in the table below, data on the prevalence of alcohol use and binge drinking varies with each survey. While estimates of alcohol use in the past 30 days from the YRBS are higher than those produced by the ILYS, these estimates diverge by only a few percentage points. In contrast, estimates produced by SAMHSA's National Survey on Drug Use and Health (NSDUH) of alcohol use among 12to 17-year-olds in Illinois are substantially lower than those produced by either YRBS or ILYS. Regardless of the data source, more efforts will be required to reach the *Healthy People 2010* goal that only 2 percent of 12 to 17-year-olds report binge drinking in the past 30 days.

Prevalence of Alcohol Use among Illinois Teenagers

	1995 Illinois YRBS	**2000 ILYS**	**2002 ILYS**	**2002 NSDUH**	**2003 CPS YRBS**
Lifetime alcohol use	78.2%	-	-	-	74.6%
Alcohol use in past 30 days	47.5%	38.3%	35%	19.0%	42.8%
Binge drinking in past 30 days	29.7%	24.7% (10^{th} grade)	21.8% (10^{th} grade)	12.0%	20.6%

A sizeable minority of high school students report riding in a vehicle with a driver who had been drinking. Illinois data are similar to national averages, which indicate that approximately 30 percent of teens rode with a driver who had been drinking alcohol. In 2001, Chicago females were slightly more likely to engage in this behavior than males (35.8 percent vs. 31.8%), but the pattern reversed in 2003 (31.8 percent vs. 33.1%). A smaller proportion of teenagers reported that they themselves had driven a vehicle after consuming alcohol. It is encouraging to note that the proportion of Illinois teenagers who engage in this behavior is lower than the national average. A gender difference similar to that observed with seatbelt use is found here: more males than females reported driving after drinking in Chicago (2003, 10.7 percent vs. 6.3%).

Tobacco. The second most popular drug among Illinois adolescents is tobacco. According to the 2002 ILYS, 18.9 percent of students smoked tobacco in the past month; this was true for 9.5 percent of 8^{th} grade students, 18.1 percent of 10^{th} grade students, and 31 percent of 12^{th} grade students. Since 1998 tobacco use by adolescents has decreased across the state. While rates of tobacco use among 8^{th} and 10^{th} graders are similar to their peers across the country, tobacco use by 12^{th} graders in Illinois is higher than the national average. While smokeless tobacco use is relatively rare – only 3.9 percent of Illinois adolescents used it in the past 30 days – use is concentrated among males, 12^{th} graders, and in counties other than Cook. Use of smokeless tobacco increased between 1998 and 2000, and this trend has been reversed among all groups except 12^{th} graders and students in Chicago Public Schools.

According to the Illinois Youth Tobacco Survey (IYTS), 7.6 percent of middle school students and 29.2 percent of high-school students currently smoke cigarettes. The reported prevalence of cigarette use among students is higher in this survey than in the ILYS; IYTS reports that 10.5 percent of 8^{th} graders, 24.7 percent of 10^{th} graders, and 41.4 percent of 12^{th} graders currently smoke cigarettes. The IYTS indicates that males and females are equally likely to smoke cigarettes in all grades. While no racial or ethnic differences are observed for middle school

students, among high school students, Whites are more likely to smoke cigarettes than Black students (32.8 % vs. 12.3%, respectively); the proportion of Hispanic students who smoke (27.5%) is not different from the rate of either White or Black students. Prevalence rates for smokeless tobacco use derived from the IYTS indicate that use increases from 2.4 percent in grade six to 7.2 percent in grade 12. The only significant difference observed is that high school males are significantly more likely to use smokeless tobacco than high school females. The rate of cigar smoking increases from 3.1 percent of grade 6 students to 18.5 percent of grade 12 students, and is significantly more prevalent among male high school students than females. Less than five percent of students report smoking a pipe and less than 8 percent report smoking bidis; use of bidis is significantly higher among Black middle school students compared to their White or Hispanic counterparts.

All of these data indicate that increased tobacco prevention efforts will be required for the state to approach the *Healthy People 2010* goals for 9-12th grade students of 21 percent tobacco use, 16 percent cigarette use, and 1 percent spit tobacco use in the past 30 days.

Prevalence of Tobacco Use among Illinois Teenagers

	1995 Illinois YRBS	**2000 ILYS**	**2002 ILYS**	**2002 IYTS**	**2002 NSDUH**	**2003 CPS YRBS**
Cigarette use in past 30 days	35.7%	24.6%	18.9%	29.2%	13.8%	16.9 percent
Smokeless tobacco use in past 30 days	7.6%	5.3%	3.9%	3.6%	-	3.5%

Sizeable minorities of students in Illinois have smoked a whole cigarette before the age of 13. According to the 2003 YRBS, 18.1 percent of Chicago students smoked a whole cigarette before age 13. According to the IYTS, 19.6 percent of male and 20.9 percent of female high school students smoked a whole cigarette before age 13. The 2002 ILYS indicated that the average at first tobacco use was 13.3 years.

In addition to the number of Illinois students who currently smoke, approximately one quarter of all students who have never smoked think they might try cigarettes in the coming year or that they would try a cigarette if one of their friends offered it to them. Hispanic high school students are the most likely to start smoking cigarettes in the coming year compared to their White and Black peers.

The IYTS found that most students in Illinois smoke Marlboro® cigarettes, and the top three procurement methods for underage smokers are giving money to someone so they will buy them, "bumming" cigarettes, and purchasing at a store. Of students who purchase their own cigarettes, most purchase them at gas stations or convenience stores. Despite laws stating that it is illegal to sell cigarettes to individuals under the age of 18 in Illinois, 73.1 percent of middle school and 54.7 percent of high school students reported they were not asked for identification when they tried to purchase cigarettes; only 31.3 percent of middle school students and 50.3 percent of high school students had someone refuse to sell them cigarettes because of their age.

Results from the IYTS also indicate that even though most students know tobacco is addictive and that one risks self-harm through cigarette smoking, more never smokers than current smokers endorsed these beliefs. Most students reported having talked with a health care provider about the dangers of smoking, and nearly two-thirds of students discussed the dangers of tobacco with their parents. Significantly more smokers thought it is safe to smoke for a year or two and then quit, that smokers have more friends, and that smoking makes you look cool or fit in. While over 90 percent of students realize that second-hand smoke is harmful, fewer current smokers endorsed this statement. Additionally, students who currently smoke are almost twice as likely as never smokers to live with someone who smokes.

Illicit drug use. Use of other illicit substances in the past 30 days is relatively infrequent, although 15.3 percent of adolescents report marijuana use, 3.1 percent report inhalant use, 1.9 percent report cocaine/crack use, 1.1 percent report hallucinogen use, 0.6 percent report ecstasy use, and 6.4 percent report using other drugs (heroin, club drugs, uppers, downers, etc.).

Statewide, marijuana and hallucinogen use have declined slightly since 1998, but use of cocaine/crack, inhalants, and other drugs are essentially unchanged. According to the ILYS, use of inhalants, hallucinogens, and other drugs is slightly higher outside Cook County than among Cook County residents.

As with tobacco and alcohol use, substantial efforts will have to be realized in order for the state to reach the *Healthy People 2010* goal that only 0.7 percent of 12-17 year olds use marijuana in the past 30 days.

Illicit Drug Use Among Illinois Teenagers

	1995 Illinois YRBS	2000 ILYS	2002 ILYS	2002 NSDUH	2003 CPS YRBS
Marijuana/hashish use in past 30 days	24.8%	16.2%	15.3%	8.11%	22.8%
Sniff glue/Inhalant use in past 30 days	-	2.5%	3.1%	-	2.7%
Hallucinogen use in past 30 days	-	1.8%	1.1%	-	-
Ecstasy use	-	-	0.6%*	-	5.3%**
Lifetime Methamphetamine use	-	-	-	-	3.7%
Other illegal drug use in past 30 days	-	8.2%	6.4%	5.7%	-
Cocaine/crack use in past 30 days	2.8%	1.5%	1.9%	-	2.4%
Offered, sold, or given illegal drug on school property	31.4%	-	-	-	38.1%

*Use in past 30 days
**Lifetime use

Mental Health

Treatment participation data are available from DHS' Office of Mental Health. These data indicate that 35,726 clients under age 18 were served in SFY2004; most of these clients were age 4-17. More than half of these clients lived Downstate (55%), 58 percent were White, and 27

percent were Black, 8,754 of these clients were diagnosed with ADHD and 11,952 were diagnosed with other behavior disorders.

Autism. According to the Illinois Autism Project's recent needs assessment, assuming that 0.06 percent of children aged 0-18 have an Autistic Spectrum Disorder, there may have been up to 21,590 children in Illinois with such a disorder in the year 2001. For the 2002-2003 school year, the Department of Education reported there were 6,125 children aged 3-21 who were receiving special services under the category of Autism.

Behavior Disorders. Using KidCare data from 2003, 9,099 children under age 21 had a diagnosed behavioral disorder, including disturbance of conduct, hyperkinetic syndrome of childhood, child, adolescent or adult antisocial disorder. The majority of these diagnoses (87%) are for disturbance of conduct, and 56 percent of those with a diagnosed behavior disorder are 10-18 years old. In 2003, 157,685 children under age 21 enrolled in KidCare had a diagnosed psychiatric disorder (ICD codes 300.9, 290-303, 305-316, 317-319, 648.4).

In 2003, KidCare paid for 171,258 prescriptions for ADHD treatment, 118,337 prescriptions for antidepressants, 95,622 prescriptions for anti-psychotic drugs, 10,220 prescriptions for anti-anxiety drugs, 7,676 prescriptions for anti-mania drugs for its enrollees under the age of 21.

Depression and suicide. According to the 2003 YRBS, a sizeable segment of the high school population reported depressed affect, and several of these students planned or carried out suicide attempts. In 1999, 30.2 percent of CPS students reported feeling so sad or hopeless almost daily in the past two weeks that their usual activities were influenced. The proportion of females reporting such feelings was higher than males (33.4 % of females vs. 27.0 % of males). In 2003 the proportion of Chicago students reporting such affect decreased to 31.1 percent, but a sizeable male:female disparity remains. In 2003, 13.5 percent of Chicago students seriously considered attempting suicide in the 12 months preceding the survey. The proportion of students who made a suicide plan in the 12 months preceding the survey was slightly smaller than the proportion who considered suicide (11.2 percent in 2003). Students who attempted suicide at least once in the past year included 12.1 percent of Chicago students in 2003; fortunately, only a small proportion (less than 5%) of these attempts required medical attention. The rate of seriously considering suicide, making a suicide plan, and attempted suicide were higher for females, but the rate of suicide attempts requiring medical attention was higher among male students.

As noted in a previous section, suicide is a leading cause of death for adolescents and young adults in Illinois. Unlike the homicide rate, the death rate from suicide has not decreased as substantially since 1998. The suicide rate in 1998 was 9.3 per 100,000 for 15 to 24-year-olds and was 5.4 per 100,000 for this age group in 2002. When the rates of only 15 to 19-year-olds are considered, this decrease is not as striking (7.6 in 1998 vs. 5.4 in 2002) as the decrease in the homicide rate over the same time period (24.2 to 14.9/100,000). In 2002, the majority of suicide deaths among 15 to 24-year-olds occurred among White males (70%), followed by Black males (14%) and White females (12%); the number of Black females who commit suicide is relatively small in Illinois.

Oral Health

Seventy-seven of Illinois' 102 counties have conducted an oral health needs assessment since 1996. The major problems identified by these needs assessments include access, high incidence of dental caries in children and adults, periodontal disease, oral cancer, injury, and sealants. The major priorities generated by these assessments include access, oral health education, early childhood caries education and prevention, and start-up or expansion of sealant programs.

There are only 17 Illinois counties with at least one practicing pediatric dentist. Three-quarters of pediatric dentists practice in the six counties with the highest per capita income; there are only three pediatric dentists for Illinois' 84 rural counties.

Dental sealant programs in Illinois have expanded in the past ten years. In 1994 there were six local and 32 county sealant programs, this had risen to 16 local and 41 county programs by 2004. The Dental Sealant Grant Program has provided 838,686 sealants to 298,782 children since 1986.

IDPH's Oral Health Division prepared a report on the prevalence of early childhood caries (ECC) among WIC-enrolled children for the Head Start Workgroup. This report sampled children between the age of 2 and 4 who were enrolled in WIC in Cook, Sangamon, Jackson, Edgar, Peoria, St. Clair, and Marshall Counties. Self-report data were collected by parental questionnaires and the child's teeth were visually examined in August and September of 2001 on 1,079 children. The report states that 33 percent of children surveyed had ECC; this was true of 40 percent of children in urban areas, 27 percent of children in rural areas, and 28 percent of children in major metropolitan areas. Not surprisingly, the proportion of children with ECC increased with the child's age from 28 percent of two-year-olds to 38 percent of four-year-olds. In contrast, the proportion of children with severe early childhood caries was 28 percent for two-year-olds, 34 percent for three-year-olds, but only 17 percent for four-year-olds. While ECC was more prevalent in urban areas, risk factors for ECC were more prevalent in rural areas. Two-thirds of rural children vs. 49 percent of urban children and 58 percent of children living in major metropolitan areas had at least one risk factor for ECC. These risk factors were: going to bed with a bottle, pacifier being dipped in something sweet, using a tippy cup bottle all day, or sleeping at mother's breast all night. Use of dental services by the children in this survey was infrequent. Only 36 percent of urban residents, 33 percent of rural residents, and 52 percent of major metropolitan residents had ever been to a dentist. The majority of children reported that they brush their teeth at least once a day: 87 percent of urban residents, 96 percent of rural residents, and 84 percent of major metropolitan residents. The type of insurance reported by respondents was Medicaid or KidCare for 76 percent of the sample and private insurance for seven percent of the sample.

Prevalence of Select Oral Health Indicators, WIC-Enrolled Children Aged Two to Four Years in Seven Illinois Counties, 2001				
	Total	Urban	Rural	Major Metropolitan
ECC	33%	40%	27%	28%
Cavitated lesions	17%	18%	12%	16%
At least one ECC risk factor	55%	49%	66%	58%
Visible food debris or plaque	53%	27%	32%	60%
Ever been to dentist	43%	36%	33%	52%
Parent visited dentist in past 12 months	49%	44%	44%	54%
Brush teeth at least once a day	87%	87%	96%	84%

Oral health data for children are available for 1993-1994 and 2003-2004 from the Healthy Smiles Healthy Growth survey. In 1993-1994, 33 percent of kindergarteners had untreated tooth decay and 56 percent had experienced some sort of tooth decay, treated or untreated, in the past. The proportion of children with untreated decay rose to 39 percent in first grade and 40 percent in second grade, but the proportion of children who had ever experienced caries decreased to 45 percent in first grade and to 41 percent in second grade. These data appear to indicate that the majority of children in kindergarten through grade two who experience caries are not having this decay treated.[9] In the 2003-2004 survey, collection was limited to third grade students. Data revealed that the prevalence of all caries had decreased from 54 percent to 46 percent, the prevalence of untreated caries decreased from 38 percent to 30 percent, and the prevalence of sealants increased from 13 percent to 29 percent. When these data are analyzed by geographic area, we see that the prevalence of caries is above 60 percent in all areas of Illinois except the Collar counties, the prevalence of untreated caries is above 30 percent in all areas except the Collar counties, and that sealant prevalence is highest in rural counties and the Collar counties. While Illinois has not achieved the *Healthy People 2010* target for any of these three indicators (but Illinois third graders in Collar counties have achieved the goal for the prevalence of untreated caries), it is clear that progress towards these indicators has been made.

Based on data collected between March 1, 1999 and February 28, 2000, only 33 percent of Medicaid-enrolled children in Illinois received any dental visits; the *Healthy People 2010* goal is that 57 percent of children in families with incomes under 200 percent of the FPL have a preventive dental visit. Having had a dental visit varied by the age of the child: 51 percent of Medicaid children aged 4-5 and 47 percent of children aged 6-12 in Illinois received a dental visit; the proportion of children in Cook County with a dental visit was higher than the statewide average. Use of oral health services drops off sharply for Medicaid enrollees aged 12-20. For those clients who received services, 30 percent of services were preventive, 29 percent were diagnostic, 19 percent were EPSDT, and 15 percent were restorative services. Among KidCare enrollees aged 5-14 in 2003, 16 percent had sealants on at least one tooth; this was true of 12 percent of enrollees in Cook county and 21 percent of enrollees elsewhere in Illinois.

Diabetes. Among individuals under age 20 enrolled in KidCare for the full calendar year 2003, 0.8 percent (6,578) were diabetic. Less than half (44%) of these individuals received an HgbA1C monitoring test, and only three percent received an eye exam.

[9] http://www2.cdc.gov/nohss/OHSurveyDetailV.asp?StateID=17

Asthma. Among all KidCare enrollees in 2003 185,653 Title XIX enrollees under age 21 and 3,831 Title XXI enrollees under age 19 had been diagnosed with Asthma. The majority of these individuals live in Cook County (55%), 11 percent live in the Collar Counties, and 33 percent live Downstate. Nearly half of these individuals are between the ages of 6-14 (46%), but children under age 6 also account for a large proportion of cases (38%). Only a small proportion of these children were hospitalized because of their asthma (4.9%), but only 51 percent of persistent asthmatics were considered appropriately medicated.

The rate of hospitalizations for asthma has decreased between 2000 and 2003, but remains higher for males than females among children under age 15. Using duplicated hospital discharge data for 2000 and 2003, the hospitalization rate for males under five years of age decreased from 613 to 522 per 100,000 and the female rate decreased from 357 to 297 admissions per 100,000 population. Among children age 5-14, the male admission rate decreased from 268 to 176 per 100,000, and the female rate decreased from 162 to 108 per 100,000. Among 15 to 24-year-olds, the admission rates for females are higher than those for males, but a decrease was also seen. The male rate for this age group decreased from 67 to 50 per 100,000 and the female rate decreased from 108 to 87 per 100,000. These figures are duplicated - one individual may have contributed multiple hospital visits in the same year.

Although asthma mortality among youth is relatively rare (0.6/100,000 for 1999-2001), it is higher among males (0.8/100,000) than females (0.5/100,000), and is highest among Black males (2.2/100,000). All of these rates are above the national average for youth under age 18.

Mortality

Mortality. In 2002, the leading cause of death for children, adolescents, and young adults was unintentional injury, claiming the lives of 738 Illinoisans between the age of 1 and 24. The rate of death from injury increased from 8.5 to 9.0 per 100,000 individuals aged 1-4 years between 1998 and 2002, but decreased slightly for individuals age 5-24 during this time (5 to 9-year-olds 4.8/100,000 in 2002; 10 to 14-year-olds, 6.7/100,000 in 2002; 15 to 24-year-olds, 32.2/100,000 in 2002). Among 15 to 24-year-olds, the rate of death from unintentional injury among males is more than three times that among females (48.8/100,000 vs. 14.5/100,000). Nearly two-thirds of deaths from unintentional injury in this age group were attributable to MVCs (63.4%); the next most frequent causes were poisoning (12.6%) and drowning (6.5%).

Homicide is the number two cause of death for 15 to 24-year-olds and claimed the lives of 395 individuals between age 1 and 24 in 2002. The majority (82.8%) of homicides were firearm-related; cut or piercing wounds, the second most commonly noted cause, accounted for 6.1 percent of all homicides in this age group. The homicide rate among 15 to 24-year-old males is more than eight times that of 15 to 24-year-old females (35.5/100,000 vs. 4.2/100,000). While it remains high, the homicide rate among individuals aged 15-24 in Illinois decreased by half between 1998 and 2002 (29 vs. 14.9/100,000). Suicide is the third most common cause of death for individuals age one to 24, and claimed the lives of 168 Illinois youth in 2002; the use of firearms or suffocation accounted for 81 percent of all suicides in Illinois.

While the above patterns hold true for the youth population in general, gender and racial differences appear when these data are examined more closely. Unintentional injury, particularly MVCs, emerges as the top killer of white youth, whereas homicide with a firearm is the top cause for black males.

The top 10 causes of death in 2002 for each age group are shown in the table below:

	<1	1-4	5-9	10-14	15-19	20-24
1	Short gestation (273)	Unintentional injury (63)	Unintentional injury (43)	Unintentional injury (62)	Unintentional injury (248)	Unintentional injury (322)
2	Congenital anomalies (272)	Congenital anomalies (23)	Malignant neoplasms (15)	Malignant neoplasms (23)	Homicide (132)	Homicide (228)
3	Maternal pregnancy complications (85)	Malignant neoplasms (18)	Congenital anomalies (9)	Suicide (13)	Suicide (48)	Suicide (107)
4	SIDS (79)	Homicide (17)	Homicide (8)	Chronic Lower Respiratory Disease (10)	Malignant neoplasms (34)	Malignant neoplasms (31)
5	Unintentional injury (60)	Influenza & pneumonia (10)	Heart disease	Homicide (10)	Congenital anomalies (17)	Heart disease (28)
6	Placenta cord membranes (46)	Heart disease	Anemias	Congenital anomalies	Heart disease (15)	Congenital anomalies (12)
7	Circulatory system disease (31)	Septicemia	Benign neoplasms	Heart disease	Chronic lower respiratory disease	Chronic lower respiratory disease
8	Respiratory distress (31)	Cerebro-vascular	Chronic lower respiratory disease	Benign neoplasms	Diabetes Mellitus	Influenza & Pneumonia
9	Bacterial sepsis (27)	Benign neoplasms	Influenza & Pneumonia	Influenza & Pneumonia	Influenza & Pneumonia	Nephritis
10	Neonatal hemorrhage (25)	HIV	Tie	Tie	Anemias	Benign neoplasms

*Numbers included only for causes with at least 10 deaths

There are gender, racial, and ethnic differences with respect to the top causes of death. Among males, suicide causes more deaths than cancers among 10 to 14-year-olds. For Black males, homicide replaces unintentional injury as the number one cause of death for 15 to 24-year -olds, and suicide is the third most common cause only among 15 to 24-year-olds. For Hispanic males, homicide replaces unintentional injury as the number one cause of death for 10 to 19- year-olds. For females in Illinois, homicide is the number two cause of death among 20 to 24- year-olds; malignant neoplasms are the number two cause of death for 5 to 14-year-olds (homicide and cancers are tied for second among one to four-year-olds). Suicide and homicide are generally less prevalent than among males, but homicide is the number one killer of Black females age 20 to 24 and the number two killer of White females in this age group. Blacks account for the majority of deaths from homicide among one to four-year-old females. Among non-Hispanic females aged one to 19, malignant neoplasms cause more deaths than homicide.

Summary

The health problems of children and adolescents in Illinois include:

1. Overweight;
2. Motor vehicle injury (including failure to wear restraints and use of alcohol);
3. Child abuse and neglect;
4. Handgun and other weapon violence (including homicide);
5. Early sexual activity and limited use of contraception, sexually transmitted infections, pregnancy and child-bearing;
6. Use of alcohol, tobacco and marijuana;
7. Depression and other mental illnesses, including suicidal behavior; and
8. Oral disease.

With the exception of alcohol and tobacco use, each of these problems is more likely to affect African-American and Hispanic children, with a more severe burden of morbidity and mortality born by African-American children. African-American children and adolescents are more likely to be involved in Early Intervention services, be abused or neglected, suffer from lead poisoning, have untreated dental caries, contract a sexually-transmitted infection (including HIV), carry a weapon to school and to die from homicide. A large number of children initiate risk-taking behavior, including the use of tobacco, alcohol and sexual activity, before 13 years of age. Unintentional injury, usually in a motor vehicle collision is the leading cause of death. Homicide is among the five leading causes of death among children between 1 and 24 years of age and suicide is the third leading cause of death among children between 10 and 24 years of age.

Children with Special Health Care Needs

Information Sources. In addition to the Advisory Panel discussed in the Needs Assessment Process, DSCC used three resources to assess the needs of Illinois CSHCN. 1) DSCC reviewed Illinois data provided by the National Children with Special Health Care Needs Survey

conducted between October 2000 and April 2001.[10] The survey population - included - children representing the Federal definition of CSHCN except those at risk. 2) DSCC conducted a Family Survey in January - April 2005 of nearly 4100 families served by DSCC (which included some SSI recipients) and nearly 900 SSI families who were referred to DSCC during the past fiscal year and had received information and referral services. DSCC Family Survey data analysis should be considered preliminary. 3) Additional data was obtained from DSCC's Child Health Information Management System (CHIMS).

CSHCN Health Status

According to data from the National Survey, 11.6 percent or an estimated 379,346 children in Illinois less than 18 years of age have a special health care need. Almost 19 percent of Illinois CSHCN have health conditions that consistently and often greatly affect their daily activities. In FY 2004, DSCC served 22,359 CSHCN, which represents approximately 6 percent of Illinois CSHCN based on the National Survey.

Family Partnership - Illinois families of CSHCN usually feel like a partner in their child's care. Data from the National Survey indicates that 60.6 percent of the families in Illinois with CSHCN believe that their doctor usually or always makes the family feel like a partner and were satisfied with the services they receive. The DSCC Family Survey revealed that 78.2 percent of those served in the DSCC program and 70.1 percent of those served by SSI believed that their main health care provider usually or always helped them feel like a partner in their child's care.

Medical Home - DSCC continues to promote efforts to improve access to Medical Homes for CSHCN. National Survey data indicates that the proportion of Illinois CSHCN with a medical home is 50.7 percent. To determine whether CSHCN in the DSCC Program had a Medical Home, the DSCC Family Survey asked to what degree the respondent agreed with the following questions: *if my child's personal doctor or nurse knows my child's health history*, *treats my child with compassion and understanding*, *is available in a timely way when my child needs care*, *listens to my concerns*, *involves me in decisions concerning my child*, and *helps me arrange for other health care services needed by my child*. Responses indicated that approximately 60 percent strongly agreed with each of those statements.

Insurance - The number of CSHCN with access to public/private third party benefits continues to improve. Inadequacy of insurance continues to be a barrier to accessing needed care. National Survey data indicates that 46.7 percent of Illinois CSHCN who are currently insured report that insurance coverage is not adequate. Since FY 2000, those families served by DSCC without a source of insurance have decreased from 26.0 percent to 6 percent in FY 2004. National Survey data also indicated that 10.4 percent of families surveyed reported that they were not insured at sometime during the past year. In FY 2000, 24 percent of DSCC children were enrolled in Title XIX. In FY 2004, this number increased to 47 percent. The DSCC Family Survey found that 21 percent of SSI families and 16.9 percent of DSCC families who reported a barrier said they had trouble accessing services because KidCare/Medicaid was not

[10] U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. *The National Survey of Children with Special Health Care Needs Chartbook 2001.* Rockville, Maryland: U.S. Department of Health and Human Services.

accepted. Of those families reporting a barrier to services, 26.5 percent DSCC families and 12.6 percent SSI families said that the needed care was not covered by insurance.

Community Systems - Most Illinois families found that services in Illinois were easy to use. The National Survey found that the proportion of Illinois families who believed that services were organized so that they could easily use them was 76.1 percent The DSCC Family Survey asked families to "identify things that get in way of your use of services for your child." Choices included items such as distance to services, communication with providers, office hours, delays in getting appointments and payment issues. For families served by DSCC, 63.3 percent reported at least one barrier while a higher number, almost 75 percent of SSI recipients, reported at least one barrier to accessing services.

Transition - Access to transition services continues to improve for CSHCN served by DSCC. The DSCC Family Survey reported that 35.5 percent of youth served by DSCC 14 years of age or older do not have a transition plan. For those youth who have a plan, only 6.6 percent of the DSCC families described that the plan met their youth's needs either *not so well* or *not well at all*. For families of youth 14 years of age or older receiving SSI, 47.8 percent reported their youth did not have a transition plan.

Program Capacity By Type of Service (*Level of the "MCH Pyramid")*

Direct Health Care and "Enabling" Services. The National Survey demonstrated that those families without insurance and where communication was poor between their primary care physician and pediatric specialists had the greatest need for care coordination. To improve services for CSHCN, DSCC, in collaboration with the Illinois Chapter of the American Academy of Pediatrics, promotes and provides training for physicians on the Medical Home model to improve coordination of care for Illinois CSHCN. Through its care coordination system, DSCC works to improve provider communication, helps the family maximize their insurance benefits, and coordinates the array of services needed by the child.

To access providers, particularly specialty providers, families often have to travel significant distances. The cost and availability of transportation remains a barrier, despite DSCC's increasing support of transportation services for eligible families, according to the DSCC Family Survey. Of those families indicating an access to care barrier, 27 percent of those served by DSCC and 32.9 percent of those served by SSI said the needed service was too far from home and almost 17 percent of families served by DSCC and 37.8 percent of those served by SSI reported that they either do not have transportation or can't afford transportation to access services. The DSCC Family Survey found that for children served by DSCC services such as primary care, therapies, special dietary products, immunizations, prescription medications when used, required less than an hour travel time. For children served by SSI, services such as prescription medications, immunizations, dental care, and primary care most often required less than an hour travel time.

Availability of Care for CSHCN. The National Survey found that Illinois CSHCN experienced the following: 16.8 percent had one or more unmet need for specific services; 11.0 percent did not have a personal doctor or nurse; and 26.7 percent needing specialty care had problems getting a referral. In the DSCC Family Survey, children eligible for DSCC services reported the

following top six unmet but needed services: dental care (8.6 %), respite care (6.6 %), specialty dental care (5.9 %), speech therapy (5.3 %), occupational therapy (4.8 %), and physical therapy (4.3 %). SSI families reported needing the following top six services but did not use them: respite care (8.4 %), speech therapy (7.3 %), dental care (7.3 %), occupational therapy (5.8 %), physical therapy (5.8 %), and early intervention services (4.7 %).

Financial Barriers to Specialty/Sub-specialty Care. Financial barriers continue to be a factor in accessing specialty/sub-specialty care by CSHCN. National Survey data indicates that 10.4 percent of Illinois CSHCN were uninsured at some time during the past year and of those currently insured, 41.7 percent report that the coverage is not adequate. In addition, 11.0 percent of Illinois CHSCN do not have a personal doctor or nurse. The DSCC Family Survey found that 17.3 percent of DSCC families and 19.4 percent SSI families reported that the cost of medical care was a major factor in deciding whether their child received care. Approximately 5 percent of both DSCC and SSI families report that they were denied care because of inability to pay for services. Third party payers do not cover all medical services needed by Illinois CSHCN. For those CSHCN served by DSCC, hearing aids, hearing tests, diapers, ostomy supplies and some kinds of medical equipment were most frequently not covered by a third party payer resource. In addition, the DSCC Family Survey found that of those families reporting barriers, 21.7 percent SSI families and 16.9 percent DSCC families had difficulty accessing care because KidCare/Medicaid was not accepted.

Shortages of Sub-specialty Physicians Serving CSHCN. According to the National Survey, 48.3 percent of Illinois CSHCN needed specialty care in the past twelve months. The DSCC Family Survey found that approximately 68 percent of the children served by DSCC and 51.9 percent of those served by SSI needed specialty care in the last twelve months. Of those reporting a need for specialty care, 2.8 percent of those children served by DSCC and 1.6 percent of SSI recipients reported that they needed specialty care in the last twelve months but did not use it. DSCC eligible CSHCN have access to the following approved surgical centers: 15 cleft/lip palate and craniofacial, five cochlear implant, two pediatric ambulatory surgical, seven pediatric cardiac, and five epilepsy surgical centers.

For families needing specialty care, the expense and time to access specialty care is significant. The DSCC Family Survey found that 45 percent of those CSHCN served by DSCC and who used specialty care in the last twelve months had to travel over an hour to those services. For CSHCN receiving SSI and who used specialty care in the last twelve months, 41.3 percent said they had to travel over an hour to receive those services. To help children in rural/underserved areas access needed services, DSCC holds clinics in locations throughout the state, particularly in the Southern Illinois, which is primarily rural. DSCC provides 60 clinics in 10 locations, serving approximately 1000 CSHCN annually.

For children who need follow-up diagnostic audiological services as a result of a newborn hearing screening result, qualified providers are rare in Southern Illinois. Strategies to develop this service include surveying all the audiologists in the state to assess availability of those having the capacity (equipment and sedation) and skills to provide diagnostic services for infants and following this up with regional trainings for audiologists to increase their understanding of

the newborn hearing screening program's processes and their skill levels in providing diagnostic and other audiological services to infants.

Four CSHCN Constructs

1) State Program Collaboration with Other State Agencies and Private Organizations

   DSCC maintains ongoing collaborative relationships with state agencies through various program initiatives to enhance comprehensive services for CSHCN. These agencies include, but are not limited to the Illinois Department of Human Services, Illinois Planning Council for the Developmentally Disabled, Illinois Department of Children and Family Services, the Illinois Department of Public Aid and Illinois Department of Public Health. Collaborative efforts include the IPLAN process, the Illinois Public Health Association, the State Hemophilia Program, the HCBS Medicaid Waiver for Children Who are Medically Fragile/Technology Dependent, Newborn Genetic Screening, Universal Newborn Hearing Screening, Early Intervention, IFLOSS, Statewide Transition Consortium, Otology/ Audiology Clinics, Illinois Interagency Council on Transition and Institute for Parents of Preschool Children who are Deaf or Hard of Hearing.

   DSCC collaborates with the Illinois Chapter of the American Academy of Pediatrics (ICAAP) to promote, develop and implement educational programs and online training on the Medical Home concept for pediatricians and family physicians throughout the state.

2) State Support for Communities

   Through the regional care coordination staff, DSCC supports community partnering to identify and meet the needs of CSHCN through participation with interagency coalitions, committees, and advisory groups, such as the All Our Kids (AOK) Networks, Early Intervention Local Interagency Councils, Transition Planning Committees, and Healthy Childcare Illinois.

   The Medical Home concept focuses on enhancing the quality of care that PCPs provide in managing children with chronic health conditions, which typically makes up about 15-20 percent of a primary pediatric practice. For some chronic conditions, pediatricians may have limited experience and expertise. To assist physicians serving CSHCN in local communities, DSCC provides a list of consultants who are available by telephone to educate primary care physicians on management issues of these CSHCN. For primary care providers enrolled as a Medical Home Provider, DSCC reimburses for telephone consultation and care coordination services for eligible children.

3) Coordination of Health Components of Community-Based Systems

   Regional office professional staff maintains relationships with local health departments, WIC programs, Head Start programs, local physicians and other community health providers to facilitate and enhance coordination of care for CSHCN.

Through a contract with the state Medicaid agency, DSCC provides coordination of services for technology dependent, medically fragile CSHCN.

For Medical Home physicians enrolled in the DSCC program, DSCC has developed a mechanism for reimbursing care coordination services for DSCC eligible children. This effort is intended to enhance care coordination for CSHCN by primary care physicians.

4) Coordination of Health Services with Other Services at the Community Level

DSCC is collaborating with ICAAP on the Illinois Medical Home Project to assist physician practices to utilize Quality Improvement teams to improve access to quality health care in a primary health care setting for children with chronic health conditions.

Through 13 Regional Offices DSCC provides care coordination to eligible CSHCN throughout the state and links families to an array of community services, including Part C Early Intervention, Special Education, Division of Rehabilitation Services and other family support services. The need for coordination of health services with educational services for CSHCN is an ongoing need. For children served by DSCC, 38.3 percent reported that they often asked for help meeting with the school to help teachers plan and 32.9 percent said they often asked for help for their CSCHN to get special school services. For children receiving SSI, 48.8 percent often needed help meeting with the school to help teachers plan and 46.9 percent needed help for their CSHCN to get special services. For those CSHCN served by DSCC, care coordinators assist families to communicate with schools and early intervention programs, participating as needed in IEP/IFSP development to enhance service integration for CSHCN. Additionally, DSCC staffs over 40 satellites to bring care coordination into local communities.

Summary

DSCC has made significant improvement in assisting families to access available public and private benefits to pay for their child's care with 94 percent of those children served by DSCC having access to either public or private benefits. DSCC will be assessing those families in the DSCC Program who report no public or private benefits to see what barriers preclude the family from accessing insurance coverage for their CSHCN. Gaps in coverage persist. Families continue to be challenged by the distance to needed specialty care. Progress has been made to increase the availability of Medical Homes for CSHCN through physician training and QIT teams. Significant improvement in DSCC's transition planning efforts continue as demonstrated by State Performance Measure 5 and compared to the results in the CSHCN Survey. Preliminary data from the DSCC Family Survey indicate that CSHCN who are recipients of SSI continue to have more challenges in accessing needed services. Further analysis of the survey will be done to identify any additional strategies to assist these families.

Priority Needs

1) Improve access to quality healthcare for CSHCN though Medical Homes.

2) Improve access for YSCHN to transition services.

3) Improve linkages to needed services for CSHCN eligible for SSI.

Availability of Care.

Data from the American Medical Association show that the ratio of primary care (non-federal family or general practice physicians in office-based practice) physicians to the entire population of the state was 1:4,452 in 2002. This is an improvement from 1:4,592 in 1999. There are wide variations in the physician-to-population ratio across the state. Cook and DuPage Counties, which account for half of the state's population, have a ratio of 1:4,385 and the ratio in DuPage County (1:3,021) is much lower than the ratio in Cook County (1:4,754). The 11 most populous counties account for 75 percent of the state's population; together, these counties have a ratio of 1:4,605. There is wide variation in the ratio of physicians to people in these counties as well. The lowest ratio is found in DuPage County; the highest, 1:8,090 is found in Will County, the fourth most populous county in the state. The 67 least populous counties (two-thirds of the counties in Illinois) account for 10 percent of the state's population. Together, these 67 counties have a physician-to-population ratio of 1:3,865. Among these 67 counties, the ratio ranges from a low of 1:1,573 in Ford County to a high of 1:16,990 in Clark County. Three counties had no non-federal primary care physicians at the time of the survey.

The number of persons in other health professions, based on active licenses, include 144,500 registered professional nurses; 28,800 licensed practical nurses; 4,400 occupational therapists; 7,200 physical therapists; 5,400 speech-language pathologists; 700 audiologists; 3,200 licensed social workers; 8,700 clinical social workers; and 3,800 clinical psychologists. (Data were not readily available by county.) With the exception of licensed social workers, the number of persons in all of these categories increased since the needs assessment in 2001.

Illinois has seven accredited schools of medicine (six are located in Cook County, and one is located downstate) and 406 residency programs; 34 nursing programs (16 graduate programs), two dental schools; 13 schools of dental hygiene; 12 didactic programs in dietetics (leading to at least a baccalaureate degree); 19 programs in social work (six advanced degree programs) ten doctoral programs in clinical psychology; and ten mental health counselor training programs.

There are 194 community hospitals in 147 cities across Illinois. There are 140 hospitals licensed to provide maternity services, 65 Medicaid Disproportionate Share Hospitals, 60 trauma hospitals and 19 major teaching hospitals. Fifty hospitals closed between 1982 and 2003, and no new hospitals have opened since at least 1988.

There are about 9,404 dentists and 1,326 dental specialists in Illinois. (The number of dentists includes all licensed dentists including specialists. It includes those who continue to hold active licenses but do not practice because they live or practice in another jurisdiction or are semi-retired or practice part-time.) According to the IDPH's recent survey on dental workforce, 83 percent of all licensed dentists are general practitioners. By this estimate, there are approximately 7,523 general practice dentists in Illinois. All but 17 of Illinois' 102 counties have been designated (in whole or in part) as "dental health professional shortage areas" for low income or

Medicaid-eligible people. In 1990, the four Illinois dental schools graduated 440 dentists annually. The Loyola University dental school closed in 1996 and the Northwestern University dental school closed in 2001. The two remaining Illinois dental schools graduate about 109 (66 from UIC, and 45 from SIU) dentists annually.

There are about 6,312 dental hygienists in Illinois. (This includes those who continue to hold active licenses but do not practice because they live or practice in another jurisdiction or are semi-retired or practice part-time.) According to the ADA, the appropriate ratio of dentist to dental hygienist is two to one. This takes into account the number of dentists who do not employ dental hygienists. The ratio of dentist to dental hygienist in Illinois is 2 to 1.5. In 1990, the six dental hygiene schools graduated from 150 to 180 dental hygienists annually. With thirteen dental hygiene schools, Illinois graduates close to 350 dental hygienists annually, a 50 percent increase in a decade.

There are 119 community-based low-income dental clinics across the state. Six of the school-based health centers provide some oral health services. Seven local health departments, serving populations of 250,000 or more, have a dental program; six of the seven programs are directed by a dental professional and five of the directors have an advanced public health degree. In FY'04, the Dental Sealant Grant program paid for the application of 26,939 sealants to 9,364 children. Further, the Medicaid program paid for the application of 48,157 sealants to 28,347 children. Finally, 4,039 children who drink private well water and attend schools without fluoridated water received fluoride mouthrinse in 2004.

The IDHS Division of Mental Health oversees grants to more than 150 public and private not-for-profit community agencies that provide mental health services and provides in-patient services through two state-run psychiatric hospitals and through contracts with private sector hospitals. The Division of Mental Health serves children who are between 3 and 17 years old who have a significant DSM-IV diagnosis, a history of 6 months of treatment in a community setting or 2 psychiatric hospitalizations in 12 months; a significant impairment in social, occupational, school, community or family functioning; and who are likely to respond to treatment either by diminished impairment or prevention of further impairment. The Illinois Children's Mental Health Act of 2003 allowed the DMH to begin serving children under three years of age. All OMH-funded community agencies are certified to bill Medicaid for services.

Underserved Areas.

The IDPH Center for Rural Health operates Illinois' Primary Care Cooperative Agreement with the federal Health Services and Resources Administration. IDPH has designated all or part of 92 of Illinois' 102 counties as primary health care professional shortage areas (HPSA). This includes all of 22 and parts of seven counties that have been designated HPSA's for the entire population, all of 55 and parts of four counties that have been designated HPSA's for low-income populations, and parts of four counties that have been designated as HPSA's for the entire, the low-income or the homeless population. Within the City of Chicago, 31 community areas have been designated as primary care health professional shortage areas. Further, all of 28 counties and one or more townships in 55 more counties have been designated medically under-served areas or to have medically under-served populations. Within the City of Chicago, 15

community areas have been designated as fully medically under-served areas, 26 have been designated as partially medically under-served areas or to have a medically under-served population. Maps depicting these designations, as well as designations of dental health and mental health shortage areas, may be found in Section 5.3, "Other Supporting Documents." Access to care due to a limited supply of health care providers remains a problem for both rural Illinois and inner city Chicago. Maps illustrating the counties, communities in suburban Cook County and Community Areas in the City of Chicago that have been designated as Medically Underserved Areas or Healthcare Provider Shortage Areas for primary care, dental care and mental health care are appended to this needs assessment.

The Center for Rural Health, with state and federal partners, conducts recruitment and retention workshops for rural and urban recruiters, provides technical assistance to small and rural hospitals, awards educational scholarships and administers a loan repayment program to increase the number of primary care providers in under-served areas of the state. In 2005, scholarships were provided for 64 medical students, six student nurse practitioners, five student physician assistants, 87 student nurses and one podiatric student. The CRH also receives a grant from the National Health Services Corps for a state and locally matched loan repayment program. Eighteen health professionals received awards in 2005.

Recommendations of the Expert Panels

Following are descriptions of each of the three expert panel sessions, and a conclusion summarizing the general recommendations.

Children And Adolescent Health Panel March 2, 2005

After an overview of the purpose of the advisory panel and background on the Maternal and Child Health Block Grant, participants were asked to identify their top three priorities among 12 possible topics. This initial exercise established key areas of interest, which then guided the rest of the day's discussion. Stickers were used on large flip chart paper so that the areas of interest would be visually displayed for the panel's view. Although no quantitative scoring was used, the summary below shows how a point value could be associated with the priorities indicated by panel members:

Clearly the top two areas of interest were access to health care and mental health. These two topics, each considered broadly, consumed the majority of the discussion time of the C&A advisory panel, followed by discussions of the remaining topics. In the course of a full day's discussion, the group identified many potential priority statements.

Areas that appeared to have minimal interest, such as adolescent sexual behavior; alcohol, tobacco and other drugs; child abuse; and violence, in fact were major concerns of the panel. However, panel members believe that they are not discrete problems, but components of broader issues that must be addressed in order to improve conditions leading to these behaviors.

Initial Priority Ranking of Various Health Problems by the Child and Adolescent Health Expert Panel				
	Advisory Members Initially Selecting as Priority			
Topic	#1	#2	#3	Weighted Total
Access to Health Care	5	2	4	23
Mental Health (including suicide)	4	3	2	20
Preventive Services (immuniz,, screening)	0	3	1	7
Early Childhood Development	1	1	1	6
Adolescent Sexual Behavior	2	0	0	6
Alcohol, Tobacco and other Drugs	1	1	1	6
Child Abuse and Neglect	0	2	2	6
Oral Health	1	0	2	5
Nutrition, Overweight, Exercise, Diabetes	0	2	1	5
Unintentional Injury	0	0	0	0
Violence	0	0	0	0
Asthma	0	0	0	0
Totals	14	14	14	

As the final activity of the advisory panel session, each panel member indicated his or her top five priorities. The number of persons who selected the priority statements are as follows:

12 Implement a "public health" approach for mental health promotion, including prevention, screening, early identification, referrals, inter-system collaboration, and a family-based educational approach.

10 Improve access to health care by expanding "extending" services, including consultation from specialists, mobile services, telemedicine, and outreach through schools and day care based services.

10 Increase support to parents, through a range of support services, including parenting education, focusing on knowledge about child development (e.g., awareness of typical crying curve of infants), and improving parents skills,

8 To promote safe and healthy behavior among adolescents, offer cross-generational, family-based community programs, particularly those with youth leadership and those that engage youth in skill acquisition.

Additional information about this panel's discussions and recommendations is included in the section titled Advisory Panel Summary. Many ideas of this panel overlap ideas common to two or all three of the panels.

Children With Special Health Care Needs Panel, March 9, 2005

This panel began with a presentation about the MCH block grant, Illinois demographic data, and overviews about the Illinois' programs for CSHCN. Also included were data from a family satisfaction survey of families who have children with special health care needs. State agency staff provided background information about five areas: family partnership and satisfaction; community service organization; Insurance; medical home and transition.

This group's highest priorities include primary care and medical homes; comprehensive family supports, including mental health services; improved collection, analysis, and application of data; and improved linkages and coordination among components of the health system, particularly at the time an adolescent transitions to the adult service system.

Family support was a high priority among panel members. Children who may need constant care and monitoring due to their health conditions can tremendously increase the level of stress for parents. Participants emphasized that family support is more than a particular set of services; it is also the guiding principle in how providers deliver all types of services.

Data collection and dissemination were also identified as crucial needs. There is lack of awareness among many families about the existence of DSCC services. Moreover, the state lacks accurate data about the total population in need, and therefore lacks the capacity to identify the costs associated with serving more children. Panel members recommended that the State find a way to obtain data about children who are not enrolled in Medicaid, and are not in the DSCC program. Little is known about the presence of special health conditions or the receipt of services among these children. The expert panel recommended that the State collect data about the number of children who would meet eligibility requirements for services, and the types of conditions and needs these children have. Then the State should analyze the potential costs of adding services for some of the highest needs groups that are currently not served.

Participants identified shortages of medical specialists who: practice in underserved geographic areas (primarily rural); are trained and willing to serve very young children; and will accept patients funded by Medicaid.

Recommendations include expanded use of mobile services and telemedicine and more extensive collaboration and consultation between specialists and primary care providers.

Access to health insurance was an issue with this panel. Concern was expressed about parents' limitations in career advancement because higher salaries would make their child ineligible for Medicaid or KidCare. The panel recommended that DSCC explore the possibility of paying insurance premiums on behalf of CSHCN when coverage is available but families lack resources to pay the premiums.

Maternal And Infant Health Panel, March 16, 2005

The structure of this advisory panel meeting largely followed that of the Children and Adolescent group described earlier.

The initial priorities indicated by the panel were:

Initial Priority Ranking of Various Health Problems by the Maternal and Infant Health Expert Panel				
	Advisory Members Initially Selecting as Priority			
Topic	#1	#2	#3	Weighted Total
Racial Disparities in Pregnancy Outcomes	4	6	3	27
Pre-Conceptional Health and Family Planning	4	2	1	17
Access to Health Care	3	3	1	16
Pregnancy and Prenatal Care	1	4	2	13
Maternal Follow-up including Postpartum Depression	2	0	5	11
Newborn Nutrition including Breastfeeding	2	1	1	9
General Women's Health	1	1	2	7
Newborn Screening and Treatment	1	0	2	5
Birth including Use of Secondary and Tertiary Facilities	0	1	1	3
Totals	18	18	18	

The area with the most interest was racial disparities in pregnancy outcomes. The expert panel dealt with this issue in a comprehensive manner, which touched on many other topics listed above. Panel members identified several problems that could lead to higher infant mortality among minorities, particularly African Americans, and several proposals to address these problems:

1. Among minority women, there is a higher incidence of general health problems, such as diabetes, obesity, and hypertension, which may not be treated adequately pre-conception due to lack of health insurance. Women who are unhealthy will not have healthy pregnancies.

2. Lack of early prenatal care is partially due to having no established relationship with a health provider, which in turn is partially due to lack of health insurance for women who are not pregnant and who have no children.

3. Prenatal care may not be delivered in ways that respect a woman's needs, e.g., the woman may have to miss a day's work (and a day's wages) because of location of services, complicated transportation arrangements, and long waits. Further, the pregnant woman may not see value in the brief, seemingly simple procedures of the prenatal visit.

4. Very high levels of unintended pregnancy among minorities suggest that additional family planning services are needed, particularly in accessible neighborhood locations. Some services, such as emergency contraception, can be realistically delivered in many locations, because expensive, comprehensive medical equipment and personnel are not necessary for certain services.

5. Providers must think about locations, hours, waiting time, respectful interaction with clients, and other ways to be more responsive to the needs of clients.

6. Cultural differences must be considered. For example, inclusion of extended family members may be important for both Latinas and African Americans. Language barriers must be addressed.

7. Men are sometimes viewed as primarily sources of child support, but are too often excluded from prenatal services, including educational programs about pregnancy and parenting. Whether or not the men are employed and provide income, their role is valuable in providing emotional support for pregnant women and care for their children.

8. Drug abuse during pregnancy must be addressed, although panel members did not have a consensus on mandatory drug testing; some favored it while others worried that women would avoid prenatal care if drug testing was mandated.

During discussion at the panel meeting, ideas for priorities were recorded. As the final activity of the advisory panel session, each panel member indicated his or her top five priorities. The number of persons who selected the priority statements are as follows:

11 Expand access to primary care and prenatal care through comprehensive, flexible models that respect women's circumstances, stresses and preferences (e.g., convenient locations and hours, transportation, mobile services

9 Promote quality, comprehensive prenatal care encompassing screenings, referrals, and education (e.g., depression, breastfeeding, smoking, domestic violence, referrals of high risk pregnancies)

8 Increase access to culturally sensitive family planning services

7 Increase screening, assessment and treatment for postpartum depression

6 Implement group model for prenatal care that includes multi-disciplinary approach, education, and peer support group

ADVISORY PANEL SUMMARY

Among the three panels, there was remarkable similarity in the approaches participants believed would be most effective. The common themes that experts repeatedly emphasized include:

1. The importance of individuals and families having access to primary health services -- specific barriers noted include providers' willingness to accept individuals funded by Medicaid, shortages of specialists in rural areas, and limited availability of culturally sensitive providers.

2. More assertive outreach to neighborhoods, with particular emphasis on reaching children through schools and day care centers.

3. A system of care with strong linkages, coordination and collaboration effective in addressing the multiple needs of children and families.

4. Promotion of positive mental health throughout childhood, and the identification and treatment of mental health problems among children and family caregivers.

Participants in all three groups repeatedly mentioned the problem of lower income families having access to a consistent health care home. Children and parents, as well as young women who are not yet parents, need a health provider that they rely on for consistent, familiar primary care, education, and referrals to other services when indicated. People need a source of care that treats them with respect, demonstrates sensitivity to cultural differences, understands and makes accommodations for any special needs they have, and is relatively conveniently located.

Particularly in the Maternal and Infant Health panel, participants noted how great a burden it is for women to take unpaid time off from their jobs, deal with the transportation system, and then spend a substantial amount of time waiting to see a health care professional for a very brief time and little apparent value from the prenatal visit. Family stress, including the economic necessity of working for low wages on an hourly basis (without paid sick or vacation time), neighborhood stress, such as violence, domestic violence, mental health issues, substance abuse were all considered aspects of a stressful life that does not promote healthy living. The health care system must recognize, appreciate and accommodate these circumstances if it is to be relevant to the individuals who need health services.

One aspect of the access problem is the shortage of services, particularly specialists, in rural areas of the state. Panel members recommended mobile services, telemedicine, and other methods of extending the expertise of specialists into underserved areas.

Related to the access problem is the need for health services to be coordinated. For example, oral health and mental health were named as areas that require more attention from primary care providers. Experts frequently named schools and day care centers as key locations for healthy habits to be promoted, and for linkages with the health care system. School-based health clinics, and co-location of health services at schools were among the ideas for better outreach and access for children and adolescents. In addition, school nurses were identified as key players in a wide range of issues.

Mental health in its broadest sense was a key need identified by all groups. Participants emphasized that families must have support for the stresses of life and particularly the challenges of rearing children. Parents need to have a better understanding of child development in order to respond appropriately to their infants and children. One example was the "crying curve" typical among infants. It is common that infants cry for longer periods of time at about six weeks of age, a phenomenon that might cause parents considerable distress if they had expected that the baby's crying would gradually diminish as the baby grew older. The simple awareness that this crying

pattern is normal can substantially relieve the parents' concerns, and also give them the comfort of knowing that the crying intensity is likely to subside in future weeks and months.

Panel members noted that mental health development is important even among the youngest infants. They believe that it is critical for parents to be aware of the emotional needs of their infants and children. The State's early intervention system recently added social and emotional development as a service and as a basis for becoming eligible for the program. In addition, every child in the early intervention program is screened for social and emotional development. Panel members stressed that more children at younger ages should be identified with developmental problems in this area so that services and supports can begin early.

Among adolescents, according to the panel, frequently co-occurring problems such as use of illegal substances, pregnancy, sexually transmitted infections, violence, and unintentional injuries cannot be effectively addressed by disjointed programs for each issue. Mental health promotion can be addressed through comprehensive approaches that emphasize achievement in positive endeavors and skill acquisition.

Mental health concerns were also a major focus of the panel dealing with families of children with special health care needs. Panel members pointed out that the some biological conditions of these children may be linked to biological factors associated with mental illness. Further the stress of caring for a child with special needs increases the probability that family members may have mental health needs.

Postpartum depression is another aspect of mental health that emerged as a high priority concern. Participants advised that all prenatal services should include screening for depression, as well as education about the potential for depression postpartum.

Complete and accurate information for family planning is considered essential. While abstinence was recognized as a highly desirable choice for adolescents, participants believed that comprehensive, factual information about preventing both pregnancy and STIs is critical.

The final list of priorities is presented in Section IV B of the FFY'06 Application and Annual Report.

Members of the Expert Panels

The name and institutional affiliation of each panelist is as follows:

<u>CSHCN Advisory Panel</u>

Lynn Handy - Facilitator
Faye Manaster - Family Voices
John Fisk, M.D. - SIU School of Medicine, Orthopedics
Linda Prewitt - Epilepsy Resource Center
Sue Mukherjee, M.D. - Rehabilitation Institute of Chicago
Kathy Campbell - SIU School of Medicine, Department of Audiology

Mary Lou England - Kane County Health Department
Dolores Nickel - Children and Family Connections (EI Service Coordination)
Myrtis Sullivan, M.D. - University of Illinois at Chicago School of Public Health
Ralph Schubert - IDHS, Office of Family Health
Charles Onufer M.D. - DSCC
Thomas Wilkin - DSCC
Gerri Clark - DSCC
Nancy Hall - DSCC
Dawn Boyer - DSCC

Maternal and Infant Health Advisory Panel

Lynn Handy - Facilitator
Kathy Baker - Peer Counselor Program Manager, La Leche League International
Dawn Boyer - DSCC
Mary DeGroot - Will County Health Department
Beverly English - IDHS, Office of Family Health
Robyn Gabel, Executive Director - Illinois Maternal and Child Health Coalition
Cathy Gray - University of Chicago Perinatal Center
Nancy Hall - DSCC
Arden Handler Dr. P.H. - University of Illinois Chicago, School of Public Health
Joyce Harant - Planned Parenthood
Julia Howard - Voices for Illinois Children
Susan Kerr - Illinois Children's Healthcare Foundation
Patti Kimmel - IDPH Bureau of Health Policy
Brooke Kinniburgh - IDHS, Division of Community Health and Prevention
Stephen Laker, MS, RS - Vermilion County Health Department
Doris Lomax - Human Resource Development Institute, Inc.
Timothy Long, M.D. - Near North Health Services Corporation
Agatha Lowe, Ph.D. - Chicago Department of Public Health, DePaul Center
Susan Marantz, M.D. - IDPH
Dennis McSwain - Division Manager, Catholic Charities Maternal and Child Health Services
Laura J. Miller, M.D. - University of Illinois at Chicago Department of Psychiatry
Anne Marie Murphy, Ph.D. - IDHFS
Jim Nelson - Illinois Public Health Association
Angela Odoms-Young, Ph.D., RD - Northern Illinois University, School of Family/Consumer/Nutrition Sciences
Deborah Rosenberg, Ph.D. - University of Illinois Chicago, School of Public Health
Stephen Saunders, M.D. - IDHS, Office of Family Health
Ralph Schubert - IDHS, Office of Family Health
Brenda Snyder - IDHS, Office of Family Health
Anne Statton, Program Director - Pediatric AIDS Chicago Prevention Initiative
Karen Yarbrough - Ounce of Prevention Fund

Child and Adolescent Health Advisory Panel

Lynn Handy - Facilitator
Karen Berg - Illinois Maternal and Child Health Coalition
Dawn Boyer - DSCC
Gaylord Gieseke - Voices for Illinois Children
Linda Gilkerson, Ph.D. - The Erikson Institute
Roy Harley - Prevent Child Abuse Illinois
MaLinda Hillman, RN, BSN - Livingston County Health Department
Michele Issel, Ph.D. - University of Illinois at Chicago, School of Public Health
Susan Kerr - Illinois Children's Healthcare Foundation
Patti Kimmel - IDPH Bureau of Health Policy
Brooke Kinniburgh - IDHS, Division of Community Health and Prevention
Lewis Lampiris, D.D.S. - IDPH, Division of Oral Health
Mary Miller - Ounce of Prevention Fund
Joel Milner, Ph.D. - Northern Illinois University
Peter Nierman, M.D. - IDHS, Division of Mental Health
Karen Reitan - Illinois Caucus for Adolescent Health
Daisy Rodriguez - Erie Family Health Center
Penny Roth - IDHS, Office of Family Health
Stephen Saunders, M.D. - IDHS, Office of Family Health
Barbara Shaw - Illinois Violence Prevention Authority
Denise Simon - IDHS, Office of Family Health
Mary Ellen Simpson, Ph.D. - IDHS, Division of Community Health and Prevention
Maria del Socorro Pesquiera - Mujeres Latinas en Accion
Kathie Wagle, RN, BSN - IDPH
Bob Egan - Illinois Children's Healthcare Foundation
Nancy Hall - DSCC